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THE OCCURRENCE AND ANALYSIS OF A REPERTOIRE OF SITUATIONAL LANGUAGE IN GRADE SIX CHILDREN

by

Ⓒ TREVOR J. GAMBELL

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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FALL, 1978

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled The Occurrence and Analysis of a Repertoire of Situational Language in Grade Six Children submitted by Trevor J. Gambell in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

This sociolinguistic study of children's oral language focused on the repertoire of situational language adopted by grade six children. A situational categorization of factors involved in the context of languaging was developed from the literature, and using four of the five speech styles identified by Joos, sociolinguistic situations were designed. These task situations were described as the intimate, casual, consultative, and formal.

A core of subjects consisting of a girl and a boy dyad were followed through each of the task situations. The data were collected by audio and video equipment and both linguistic and nonlinguistic transcriptions were made. The transcribed oral language and nonlinguistic features of communication were matched prior to analysis of the data.

Eleven different types of analysis were employed in order to examine which measures were able to differentiate task situations, and therefore situational language use. Most analyses focused on the linguistic data of the key subjects, while the two descriptive analyses used data collected from all subjects.

An analysis was made of the subject matter which formed the topical language base of children in the four task situations. Experiential basis categories were developed to describe the origins of subject topics. The other subjective analysis, which also necessitated the development of a category system, was designed for functional and nonfunctional features of communication.

Quantitative-descriptive analyses were undertaken of

vocabulary items and included lexical diversity analysis using the type-token ratio, a study of abbreviated language forms described as contractions, compactions and truncations, and the colloquial and standard forms of "yes." Another method of differentiating situational language use was provided by a study of lexical density and lexical content words. An analysis of grammatical features was undertaken using the C-unit, elaboration of C-units through the use of clauses and prepositional phrases, and a lexical verb measure using the type-token ratio. Linguistic feedback was described by means of a linguistic dominance analysis. The final measure used was that of extraneous linguistic material which included maze-like language, filler language, and language repetitions.

Most of the analyses differentiated the formal situation while grouping the intimate, casual and consultative situations as generally informal. The measure of lexical density differentiated the four task situations suggesting a repertoire of four roles. The subjective analyses of subject matter and nonlinguistic features also differentiated the task situations in the study.

It was found that a study of nouns proved useful as a means of analyzing situational language use while two different approaches to the use of verbs did not prove useful. Several analyses suggested that norms might be established for different features of language use in specified situations.

Many implications for further research and for education can be derived from the study. The interlinking of sociolinguistics and child language development suggests a new focus to both the study of and the educational development of, children's language. This study has suggested methods of analysis which might be used to isolate and describe the speech styles used by elementary school children.

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Chapter 1

THE INTRODUCTION AND STATEMENT OF THE PROBLEM

INTRODUCTION

Sociolinguistics has captured the attention of linguists, sociologists and anthropologists since pioneer work was done in these interdisciplinary fields by J. R. Firth beginning in the early 1930's. He coined the term "context of situation," and this has been the foundation stone for many theories which have been applied to the functions of language, the sociology of language, and more lately, speech styles and registers.

The methodology applied to sociolinguistic study, and what has variously been termed "sociology of language" by Fishman, and "ethnography of communication" by Hymes, is an ethnographic one. Sociolinguistics takes an ethnographic stance when studying language and social man, and such a methodology uses an emic rather than etic form of analysis, that is, it presupposes no formal 'a priori' categories but describes the behavioural phenomena in descriptive terms rather than in discrete, quantitative terms.

The writings on language functions, speech styles and registers are largely theoretical, being sociolinguistic constructs. Work with the language functions of children has been undertaken by Halliday (1969) and Tough (undated). There has been little research into the speech styles of children (Jensen, 1973). Of the research done the majority has either been interested in teacher-pupil interactions, has begun ethnomethodologically but ended in etic analysis, or has neglected the vital interactional components of language events which would allow a range or variation of speech styles.

Literary critics and analysts have long explored the use of style, called stylistics, in literature and written language, and have come up with several models of stylistics. While often not immediately applicable to spoken language, they do suggest the types of styles we might expect. In sociolinguistics there is a need to find linguistic and social situations to match styles, from which language usage might be predicted.

PURPOSE OF THE STUDY

The classroom is both an institutional setting and a social setting, and if the researcher is to take these settings into account when studying children's behaviour then an appropriate methodology is required. More specifically, if we as educators consider the development of language concurrent with the development of the child as a social being, then a sociolinguistic approach to language study provides an appropriate research model.

This study attempts to develop a methodology for both eliciting and describing children's language in different social settings, requiring different users and different situational uses of language. Such a methodology, it is proposed, combines elements of both an ethnomethodological approach, where language behaviour is observed and recorded in natural settings, and experimental research methodology where variables are controlled and others manipulated. In this study the dependent variable is simply described as oral language production.

The study also aims to develop, from the literature and from classroom observation, various systems for both recording and analyzing the oral language of children, where this language is generated in various settings determined by sociolinguistic factors, notably degree of formality. The main purpose of the study is to determine whether children at the age level studied do possess a repertoire of situational language where registers are differentiated by their use of language. If so there are grounds for further study, and in the longer term, implications for teaching the language arts, for testing children's language, and for diagnosing language "deficits" in the elementary school.

QUESTIONS TO BE ANSWERED

The questions to follow will be answered through analyses of the data. They will be answered by the most revealing means, which at times might be quantitative-descriptive, and at other times, descriptive.

1. Do the children in the study have a repertoire of roles and role-relations which are differentiated by the nature of language used in different social situations?

2. Is the use of a variety of social situations and different contexts of situation a promising method of designing language tasks to evoke children's oral language?

3. Are the measures of lexical diversity and lexical density capable of evaluating and differentiating the situational language uses of children in the study?

4. Is an analysis of abbreviated language forms (contractions, compactions, truncations and colloquial "yes") capable of evaluating and differentiating the situational language uses of children in the study?

5. Is feedback of both a linguistic and a nonlinguistic nature capable of evaluating and differentiating the situational language uses of children in the study?

6. Are syntactic measures capable of evaluating and differentiating the situational language uses of children in the study?

7. Is the study of extraneous linguistic material capable of evaluating and differentiating the situational language uses of children in the study?

8. Is the situational categorization a valuable method for describing the sociolinguistic setting of the children in the study, and are there implications for elementary language arts instruction?

9. Is the methodology employed in the study a fruitful one for a sociolinguistic description of children's language, and could it be further employed in describing the possible repertoires of children's speech styles?

TERMS USED IN THE STUDY

The terms and definitions which follow are those which are used in, and at times guided, the design of the study and the research questions proposed in the previous section. Other more specific definitions which are used in the data analysis appear in Chapter 4.

Context of Situation: subsumes all social and linguistic data that together comprise the situational spectrum in which a language event occurs. The context of situation brings into relation the following categories:

A. The relevant features of participants: persons, personalities.
  (i) The verbal action of the participants.
  (ii) The nonverbal action of the participants.
B. The relevant objects.
C. The effect of the verbal action.

Speech Style, and Register: is a variety of language according to use. Each speaker has a range of varieties and chooses between them at different times; language varies as its function varies. Register or style is situationally-differentiated language variety. The two terms are synonymous, "style" being preferred by some North American sociolinguists, and "register" by British sociolinguists.

Roles and Role-Relations: linguistically, the repertoire of roles one adopts represents one's current experience of using language. Socially, one's repertoire of roles refers to the number and character of the roles the individual enters into at any time. A speaker is always aware of an audience when he plays a particular part.

The role-relation ranges along a continuum of intimate to formal.

Lexical Diversity: is a measure of the range or breadth of vocabulary used in a language sample. It is computed by the type-token ratio which counts the type and number of times used of each word in units of 100-word segments. The measure is shown as a ratio.

Lexical Density: is a measure which is computed as a ratio of lexical content words to total orthographic items in a particular text. The measure is usually shown as a percentage. Lexical density has been used to differentiate speech styles.

Abbreviated Language Forms: are the various types of linguistic "shortcuts" which speakers use. They include contractions, compactions and truncations as well as the colloquial use of "yes." The various types of abbreviated language forms are defined with examples in Chapter 4.

Feedback: is the degree of linguistic and nonlinguistic interaction between members in a language event. Linguistic feedback may be measured by the degree of dominance of each person in the group or dyad. Nonlinguistic feedback may be measured by the type and range of nonlinguistic features in a language event.

Syntactic Measures: used in the study form the analyses of the grammatical features of oral language. When syntactic measures are mentioned they include the C-unit (communication unit), elaboration of C-units, and lexical verb analysis using the type-token ratio. The three types of syntactic measure are further defined with examples in Chapter 4.

Extraneous Linguistic Material: are all those phonological utterances, words, expressions, exclamations, interjections, speech continuers, linkers, etc., which are extraneous to a logical, syntactic, and refined presentation of language. The presence of extraneous linguistic material (ELM) leads to language tangles and mazes which inhibit the flow of language. When ELM is eliminated from a language text what remains can be readily subdivided into linguistic units such as C-units. The four types of ELM are defined with examples in Chapter 4.

Situational Categorization: describes a system for the categorization and identification of all of the components, institutional, social, linguistic, and nonlinguistic, which make up the context of situation for a sociolinguistic event or occurrence. The situational categorization scheme is to be found at the beginning of Chapter 4.

DESIGN OF THE STUDY

In order to elicit oral language from grade six children, specifically a range of language marked by differentiated situational usage, tasks were designed to provide four distinctly different social and linguistic situations.

SUBJECTS

A core of subjects was used throughout the four tasks. The core comprised two pairs of intimate friends, one of girls and one of boys, at the grade six level. Each child was chosen on the basis of average-to-above linguistic ability and general achievement. They also had to be willing to participate in the study. Additional subjects were added to each task situation. These subjects were selected according to the same criteria plus on the basis of a sociometric survey.

TASKS AND PROCEDURES

The four task situations were designed around four of the five speech styles identified by Joos (1960, 1967). The four tasks were designed to create a context of situation and to elicit situational language of either an intimate, casual, consultative, or formal nature. The four key subjects form the core of two groups, one of girls and one of boys. Each dyad was placed in the first task situation, the intimate situation. Then two additional subjects were added to form the second task situation for each group. Additional subjects were added to Task 2 to form the third task situation. For the fourth task situation each key subject gave a formal oral presentation to a group of twelve peers which included the other three key subjects.

Each task situation was audiotaped and videotaped in order to capture all linguistic and nonlinguistic data. Both audiotapes and videotapes were carefully transcribed so that all linguistic and nonlinguistic features of each context of situation were available for analysis.

ANALYSIS OF THE DATA

Systems for analyzing the data were devised from the literature and from the responses of subjects in the pilot study. In the case of descriptive analyses and those developed by the investigator, validation procedures were carried out using university professors and doctoral students in the fields of curriculum and language arts. In the case of analyses drawn from the research literature, reliability procedures were carried out using doctoral students in the same fields.

DELIMITATIONS AND LIMITATIONS OF THE STUDY

The following factors limit the interpretation and generalization of the findings:

1. The tasks which are designed to elicit oral language featuring a variety of situational usages are, in some respects, artificial social situations. They are artificial in the sense that they were prescribed and designed by the investigator. Therefore, no claim is made to naturalistic language settings. However, if specific situational usages are differentiated by the tasks, as supported by the analyses of the data, then it can be confidently assumed that in naturalistic sociolinguistic settings the differentiation of situational usage might be even more clearcut, and one could begin to investigate a repertoire of speech styles or register.

2. The children used in the study were from a grade six class in a particular school in a middle-class socioeconomic neighbourhood.

SIGNIFICANCE OF THE STUDY

One of the important aspects of the study is its attempt to examine the interaction between two major components of human behaviour, namely the use of language, and the social organization of behaviour, among children. Sociolinguists accept that the greatest, most potent stimulus for language is the social context in which language develops, and to which language adapts.

The design of the study and the methodology employed, which melds child language development with sociolinguistics, is of importance to the study of the language use of children. In the quest to understand language development the study starts with context, not with language.

Third, it will be of significance to discover if the children in the study adapt their language to the various contexts of situation in which they interact. If this does occur then there are many important ramifications for both the study and diagnosis of child language development, the assessment of language competence, and the development of language curricula. If it can be suggested that language develops as the child explores and experiences social contexts, and that the broadening of social contexts is concomitant with a broadening of language use and function, then the way is open for further studies which can explore this mutual social and linguistic development.

The various methods of analysis applied, adapted, and developed are also significant in light of the possibilities they might suggest for looking at the language of children. If various and varied methods of analysis are reliable in differentiating situational language use, then new directions for research will have been uncovered, and different perspectives on language development and language curriculum design can begin to be considered.

THE ORGANIZATION OF THE STUDY

This chapter has provided the reader with a brief overview of the study and with the questions that led the researcher to the formulation of the methodology by which means the problem could be examined. The remainder of the study follows in this manner:

a. Chapter 2 presents the rationale for the study and for the methodology employed. It presents the theoretical bases for the research approach adopted and for the types of analyses to be utilized. This chapter also reviews the related research and literature which has touched on the subject and study of speech styles and register.

b. Chapter 3 describes the design of the study, which includes the selection of subjects and the development of the task situations. Data collection procedures are also discussed.

c. Chapter 4 describes the many types of analysis to be applied, and gives definitions and procedures for each type of analysis. As well the details of transcription of both linguistic and nonlinguistic features are provided.

d. Chapter 5, the longest of all the chapters, describes in detail the results of analysis and reports the findings.

e. Chapter 6 is the concluding chapter and in it the study is summarized, conclusions of the study are drawn with the answering of the research questions, implications made for education, and suggestions made for further research.

Chapter 2

THEORETICAL BACKGROUND AND RELATED RESEARCH

INTRODUCTION

This chapter is divided into two major parts. The first part deals with the theoretical and philosophical aspects of the study and of sociolinguistics, and places the study in the general framework of sociolinguistic concern. Subsections move into pertinent concepts and ideas of sociolinguistics, such as the interrelationships of linguistics and sociology, language and speech, language functions, register, and speech styles. The rationale for the development of the situational categorization and the task situations used in the study come into this section. This first part concludes with a discussion of how sociolinguistics bears import for education.

The second major part of this chapter focuses on research studies that have been undertaken both in sociolinguistics and in education and which are pertinent to the study. The research reviewed is restricted to studies carried out in the western world and in the English language. More general studies of situational and/or social aspects of language are also reviewed.

THEORETICAL AND PHILOSOPHICAL ASPECTS

1. SOCIOLINGUISTICS

Fishman (1971b) uses the term "sociology of language" in preference to "sociolinguistics" because it implies a broader field of interest, one that is less linguacentric. The distinction is not important in this study; when the term "sociolinguistics" is used it is equivalent to Fishman's sociology of language. He defines his sociology of language as that which examines the interaction between the two aspects of human behaviour: use of language, and the social organization of behaviour (Fishman, 1972c).

Sociological linguistics, for Halliday (1973a), has as its criteria for selecting the area of study those that are sociolinguistic. Thus one investigates those contexts and settings that are socially significant. Halliday considers it ". . . not irrelevant that language has evolved in the service of social functions, so that we may expect to take account of social factors in explaining the nature of language" (1973a, p. 80).

The role of speech in socialization is the concern of Hymes (1972, pp. 124-129). He sees the role of speech in socialization and the context of its acquisition as varying in every aspect of the patterning of speech events, factors, and functions. Kinds of variation can be highlighted with respect to the speech materials and resources available, ". . . the processes often stressed in study of personality formation, social structure and organization, and cultural values and beliefs" (p. 126). This is all part of what Hymes aptly calls "the ethnography of speaking." Using that as a title (1972) he states that sociolinguists study ". . . verbal behavior in terms of the relations between the setting, the participants, the topic, the functions of the interaction, the form, and the values held by the participants about each of these." The ethnographic approach, with its many components, is apparent here.

The description given by Gumperz (1964) has yielded the term "ecology," which has prompted at least one study into "linguistic ecology." He describes sociolinguistics ". . . as the study of verbal behavior in terms of the social characteristics of speakers, their cultural background, and the ecological properties of the environment in which they interact" (p. 137). The notion of "ecological properties" and linguistic "environment" points to the ethnographic focus on communication and verbal interaction.

Labov (1972) states that a sociolinguistic variation is one which is correlated with a nonlinguistic variable of the social context, such as the speaker, addressee, audience, setting, etc. Labov at times can be called a sociophonetician because some of his work has identified phonetic sociolinguistic variables as markers. He makes the point that not only do these show distribution over socioeconomic, ethnic, or age groups but they ". . . can be ordered along a simple dimension according to the amount of attention paid to speech, so that we have stylistic as well as social stratification" (p. 283).

What follow are major concepts and ideas of sociolinguistics which are discussed here because they all form a part of the study and the methodology employed for task development and analytical systems.

a. Context of Situation

This term names a basic sociolinguistic concept first used by Malinowski but elaborated by Firth (1957, 1964a, 1964b).

> A piece of speech, a normal complete act of speech is a pattern of group behaviour in which two or more persons participate by means of common verbalizations of the common situational context, and of the experiential contexts of the participants (1964b, p. 173)

Firth views the context of situation as best used as a schematic construct to apply to language events. It comprises a group of related categories at a different level from grammatical categories, but of the same abstract nature. The context of situation brings into relation the following categories:

A. The relevant features of participants: persons, personalities.
   i. The verbal action of the participants.
   ii. The nonverbal action of the participants.
B. The relevant objects.
C. The effect of the verbal action.

Firth (1964a, pp. 66-67) groups contexts into these common types of usage (social categories): common, colloquial, slang, literary, technical, scientific, conversational, and dialectal.

b. Style and Register

In general the North American sociolinguists have used the term "style" when describing the functions of language in social contexts, while the British have used "register." In this discussion the terms are treated synonymously. Enkvist, Spencer and Gregory (1964, p. 98) define style as the result of the speaker's or writer's relationship with his public, subject, and linguistic inventory.

Riffaterre (1959) defines style in terms of written or literary style, though its application to speech styles is apparent.

> Style is understood as an emphasis (expressive, affective or aesthetic) added to the information conveyed by the linguistic structure, without alternation of meaning. Which is to say the language expresses and that style stresses, . . . (p. 155).

The term "style" denotes level of formality for Doughty, Pearce and Thornton (1972, p. 191). Joos (1960, 1967) also uses level of formality to isolate speech styles. Since the speech styles identified by Joos form the basis of this study, they will be elaborated later. As such, style is developed and used in conjunction with social groups who come together for some purpose whether professional, commercial, recreational, educational, etc. Social groups may be temporary or long-lasting.

> The persistance of a social group over any length of time brings about the development of particular ways of using language, which will distinguish members of groups from others, while giving cohesion and a sense of identity to the group itself (Doughty et al., 1972, pp. 190-191).

Gumperz (1964) defines speech styles in terms of the advance information they provide about the nature of messages, and the fact that they speed up communication ". . . in somewhat the same way that titles and tables of content help in reading a book" (p. 138). Implicit in this definition of sorts is the notion that speech styles are predictive of linguistic coding.

The British sociolinguists have been particularly concerned with register. Halliday (1974) sees types of linguistic situations as differing from one another in three aspects: (1) as regards what is actually taking place; (2) as regards what part the language is playing; (3) as regards who is taking part.

> These three variables, taken together, determine the range within which meanings are selected and the forms which are used for their expression. In other words, they determine the register (p. 32).

Therefore the notion of register refers to the fact that the language we speak or write varies according to the type of situation.

Halliday, McIntosh and Strevens (1972), in a discussion of the ways in which language varies, state that it is possible to recognize varieties of a language using a dimension which is distinguished according to use.

> Language varies as its function varies; it differs in different situations. The name given to a variety of a language distinguished according to use is 'register' (pp. 149-150).

The only sociolinguist to have undertaken any directed study of register, and that in a multilingual setting, is Ure (1969). In two consecutive articles she describes what she calls "language-in-action." Like Halliday et al. she defines register as situationally-differentiated language variety. Of great interest is her comment on the role of linguistics and register.

> Descriptive linguists are concerned about how to identify and describe the many different registers that exist within the framework of any given language; applied linguists are concerned about how to present and how to teach varieties appropriate to the students' needs (p. 107).

Register and speech styles are the focus of this study, and a detailed section which follows is devoted to discussion of these concepts. Here the concept was introduced by the investigator and defined by the most important writers on the subject.

c. Situational Switching

A shift in situation may well require a shift in language variety. Fishman (1972c, p. 49) discusses how a shift in language variety may signal a shift in the relationship between co-members of a social network, or a shift in the topic and purpose of their interaction, or a shift in the privacy or locale of their interaction. Fishman (1965, p. 79) also uses the term "situational variance." The degree of maintenance or shift may be quite different in conjunction with more formal, less formal, and intimate communication. He noted that where language shift is resisted more intimate situations seem to be most resistant to interference and switching.

d. Domains

This concept generally means the context of situation in which language fulfills a sociofunctional purpose. Fishman (1965) defines domain as

> . . . a socio-cultural construct abstracted from topics of communication, in accord with the institutions of a society and the spheres of activity of a culture, in such a way that individual behavior and social patterns can be distinguished from each other and yet related to each other (p. 75).

Certain domains are a social nexus which bring people together primarily for a certain set of role-relations and in a delimited environment. Fishman (1965) also uses the term "domain variance" and defines it as the degree of maintenance or shift, quite different in each of several distinguishable domains of language behaviour, which may reflect differences between interacting populations and their sociocultural systems with respect to such things as autonomy, power, influence, domain centrality, etc. "Domains require sub-analysis in terms of the role-relations that are crucial to them as well as sub-analysis in terms of topical variance" (1965, p. 79).

Fishman (1971c) stresses again the fact that domains enable us to understand that language choice and topic are related to widespread socio-cultural norms and expectations. Domains may be at the level of sociopsychological analysis: intimate, informal, formal, and intergroup (p. 587). Topic, role-relation and locale are all subsumed under domain.

A precise definition of domain is provided by Fishman (1972c, p. 50). Domains are where the boundaries come that differentiate between the class of situations generally requiring one variety of language and another class of situations generally requiring another variety of language.

e. Institutional Linguistics

This term gives another way to describe the essential social and psychosocial relationships between functions and the use of language, which results in register and style. Hasan (1973) states that language can be studied formally and institutionally.

> The formal study of language is concerned with the network of relationships obtaining amongst the 'bits' of a given language, whereas the institutional study of language places it in relation to some circumstance of the speech community (p. 255).

Halliday (1974, p. 58) sees the structure of an institution as enshrined in the language in the different types of interaction that take place and the linguistic registers associated with them. Halliday, McIntosh and Strevens (1972) talk of institutional linguistics where the linguist looks ". . . at the same data, language events, but from a different standpoint. The attention is now on the users of language, and the uses they make of it" (p. 139).

Institutional linguistics begins with the idea of language community, which comprises a group of people who regard themselves as using the same language. But there are varieties in a language, and subsumed under this are

> . . . varieties according to users (that is, varieties in the sense that each speaker uses one variety and uses it all the time) and varieties according to use (that is, in the sense that each speaker has a range of varieties and chooses between them at different times). The variety according to users is a dialect; the variety according to use is a register (Halliday et al., 1972, p. 141).

2. LANGUAGE IN A SOCIAL CONTEXT

The inappropriateness of studying language in isolation from that which stimulates language is recognized by most researchers in the area of language. Sociolinguists accept that the greatest, most potent stimulus for language is the social context in which language develops, and to which language adapts. The various adaptations that language makes are the speech styles and registers used by the individual in different social settings.

Malinowski in 1935 was one of the first sociolinguists to espouse an ethnographic approach to language study.

> The false conception of language as a means of transfusing ideas from the head of the speaker to that of the listener has, in my opinion, largely vitiated the philological approach to language. The view here set forth is not merely academic: it compels us . . . to correlate the study of language with that of other activities, to interpret the meaning of each utterance within its actual context;

> and this means a new departure in the handling of linguistic evidence (p. 9).

And in the same prophetic work he continues:

> I think that it is very profitable in linguistics to widen the concept of context so that it embraces not only spoken words but facial expression, gesture, bodily activities, the whole group of people present during an exchange of utterances and the part of the environment on which these people are engaged (p. 22).

Hymes announced in 1967 that there was underway a long-term shift of emphasis in American linguistics. That shift he saw as one from focus on structure to focus on function—"from focus on linguistic form in isolation to focus on linguistic form in human context" (1967a, p. 642).

In his Introduction to Cazden, John and Hymes (1972), Hymes determines that language must be studied in its social context, in terms of its organization to serve social ends. "The functions of language in the classroom are a special case of the general problem of the study of language in its social context" (p. xix). Most importantly, Hymes sees the key to understanding language in context is to start, not with language, but with context. This idea is a foundation stone of sociolinguistics.

Edwards (1976) believes that "speech may reflect social structure or be determined by the stylistic level demanded by speakers of a certain rank or in situations of a certain type" (p. 14). However, the social constraints are themselves announced and reinforced by that choice of style, and might be modified or changed if the stylistic choice were different.

For Doughty, Pearce and Thornton (1972) society exists because men have language, which implies that language determines social relationships and interactions. They state that language exploration cannot stop at the boundaries of language, but must go beyond that to look at the social context which makes the activity of languaging a meaningful one. They identify five groups where a particular language user will make an entry in each group: geographic or ethnic, kinship, occupational, public, personal (p. 68).

The subsection to follow, Language and Social Man, is closely related to this discussion though different writers have chosen to use different labels for the concept of socialization. Halliday's concern is with language and social man, and he introduces the important idea of "meaning potential" to an understanding of language development.

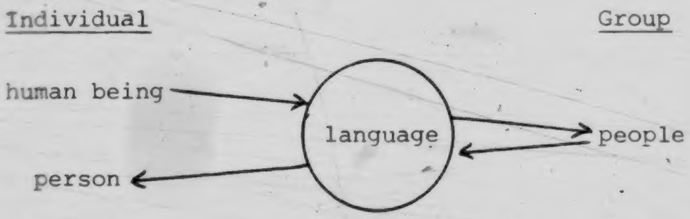
3. LANGUAGE AND SOCIAL MAN

Halliday (1973a) sees this decade as preoccupied with the study of social man, not only in relation to his environment, but in relation to the human environment. The individual is hereby seen as the focus of a complex of human relationships which together define the content of his social behaviour. This, in turn, provides a perspective on language; the behaviour of human beings in relation to their social environment is largely a matter of linguistic behaviour. "The study of man presupposes the study of language and social man" (pp. 48-49).

Therefore, the internal organization of natural language is best explained in the light of social functions which language has evolved to serve. Because language has evolved functionally, the relation between language function and structure will appear less directly and in more complex ways in the adult language system than in child language (p. 34). Thus adult language differs functionally from that of children, and the variety of social functions is greater in the adult, that is, the adult has what Halliday describes as a very broad diatypic spectrum, the child a narrow one (p. 35). "The internal organization of language is not accidental; it embodies the functions that language has evolved to serve in the life of social man" (p. 44).

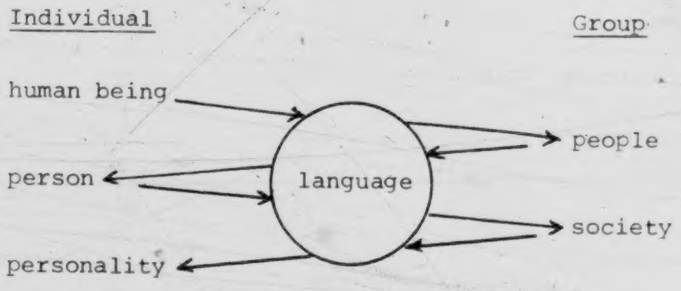
Linguistic processes are seen as the ones whereby the child becomes social man. The inference is that educators should be concerned with those aspects of the child's experience which centre around social contexts and settings. "The study of language as social behaviour is in the last resort an account of semantic options deriving from the social structure" (p. 64). Halliday's concept of meaning potential is evident in this statement.

In a later publication, Halliday (1974) expands on the important idea of language and social man. It is through language that the human being becomes a social person, one of a group of "people." Halliday (p. 10) presents this idea diagrammatically.



The individual is seen as the configuration of a number of roles which are defined by the social relationships in which he enters, and from these roles he synthesizes a personality. This is illustrated by

Halliday in a second diagram (1974, p. 11).



Halliday discusses social aspects of language use which form part of the semantic network as realization of behaviour patterns. The social aspects establish and maintain the individual's social roles, establish familiarity and distance, various forms of boundary maintenance, and types of personal interaction. They are largely independent of setting, but relate to generalized social contexts such as mother-child (p. 79).

The other component of the semantic network of behaviour patterns is that of the situation types and settings in which language is used. Halliday calls this "language in setting." The concern is not with behaviour patterns that are socially significant in themselves, ". . . but with socially identifiable units—transactions of various kinds, tasks, games, discussion and the like—within which the behaviour is more or less structured" (p. 80).

This leads into the important idea of "meaning potential" as introduced by Halliday (1973a, 1974). The language of the child is ". . . a set of socially contextualized resources of behaviour, a meaning potential that is related to situations of use" (1974, p. 35). The way the study of language and social man is envisaged is through the concept of meaning potential, which might be referred to as a kind of "socio-semantics," in the sense that it is the study of meaning in a social or sociological framework (1974, pp. 35-36).

If we regard language as social behaviour, then it means that we are treating language as a form of meaning potential. It is what the user of language, the speaker, can do. Meaning potential must be translated into linguistic potential, which is the concept of what the speaker "can mean." "The potential of language is a meaning potential. This meaning potential is the linguistic realization of the behaviour potential; . . ." (1973a, p. 51). This meaning potential is, in turn, realized in the language system as lexicogrammatical potential, which is what the speaker "can say" (1973a, p. 51).

Halliday sees each stage as able to be expressed in the form of options. The option in the construction of various linguistic forms, such as sentences, serves to realize the options in meaning which, in turn, realize options in behaviour which a social theory can interpret.

> Meaning potential is defined not in terms of the mind but in terms of the culture; not as what the speaker knows, but as what he can do—in the special sense of what he can do linguistically (what he 'can mean' . . . (1974, p. 52).

Further elaboration is given the idea of meaning potential by Enkvist, Spencer and Gregory (1964). They describe the relationship between the substance and form of a piece of language on the one hand, and the extra-linguistic circumstances in which it occurs on the other hand, giving what we normally call meaning to utterances (p. 68).

Gumperz (1971, p. 225), using the idea of "intent" for meaning potential, identifies three factors which enter into the choice of speech events to be enacted. The first is knowledge of communicative intent: wanting to ask a favor, ask some information, change someone's opinion, or talk to be sociable. Intent may be conscious or subconscious. The second is setting: home, public store, classroom, etc. The third is identity relationships: the speaker utilizes his knowledge of his audiences and their possible social identities to determine what identity relationship to assume, that is, whether he can treat them as equals, inferiors, superiors, casual acquaintances, colleagues, close friends, etc.

Firth (1964b) sums up this discussion when he argues that we learn our languages in stages as conditions of gradual incorporation into the social organization.

> The origins of speech must be sought in the way we learn it and use it in the course of life. The approach to speech must consequently be chiefly sociological (p. 135).

4. LANGUAGE AND SPEECH

Up to this point in the discussion, both terms, language and speech, have been used. Now it is necessary to consider the sociolinguistic differences in meaning and use of these two terms.

Hymes (1972) considers that structure and pattern have been treated as virtually the exclusive property of language. He states that for speech as a physical phenomenon this view is tenable. But "for speech as a social phenomenon, the case is different. Speaking, like language, is patterned, functions as a system, is describable by rules" (p. 131).

Halliday's use of "meaning potential" has already been discussed. Doughty, Pearce and Thornton (1972, p. 104) use the generic term "language" to mean the equivalent of "meaning potential," while the term "speech" has as its equivalent "language in use."

Running through the views of these writers is the important idea that both language and speech are patterned, a discussion of which follows. Cazden (1966) underlines this point, also stating that speech is different from language. Speech activity is not random; like the language it is patterned and governed by rules, and this patterning must be learned by linguistically active people in the society. The patterning of speech activity is not the same from society to society, nor from group to group within societies.

a. Individual Differences

The idea of individual differences in speech is important to bear in mind when some linguists speak in terms of register and styles, roles and role-relations, etc., being socially determined. The ethnographic approach to linguistic study is aimed at the study of individual language use in social settings, but to focus on social determinants of language use is to ignore much of the psychosocial function of language. Halliday's terms "language use" and "language users" are very useful.

Enkvist, Spencer and Gregory (1964) address their discussion to written language, mainly literature, but their remarks on the individual quality of style have wide linguistic appeal. Having a style means that amidst the language shared with others one speaks a particular, unique and inimitable idiolect.

b. Idiolect

The best definition of idiolect is that provided by Halliday, McIntosh and Strevens (1972, p. 156) who describe the individual as the smallest dialect unit, with each speaker having his own idiolect. An utterance is the smallest institutional unit of language activity, and viewed institutionally, it is an utterance in a situation, identifiable by dialect and register. A set of language events can be defined as the language activity of one individual in one register. "This intersection of idiolect and register provides an institutional definition of individual style" (p. 157).

Some registers are extremely restricted in purpose and employ only a limited number of formal items and patterns. The language activity in these registers can accommodate little idiolectal variety. Such registers are restricted languages and can be found in such circumstances as legal and official documents and regulations, weather forecasts, and verses on greeting cards.

Ullmann (1964) summarizes the above discussion in his definition of idiolect. He calls idiolect individual language, ". . . the totality of speech habits of a single person at a given time" (p. 118).

5. LANGUAGE AS SYSTEMATIC, INVOLVING CHOICE

The discussion so far has touched on the fact that both language and speech are patterned, that there is a system to both, and that the speaker makes a choice as to speech style or register according to factors such as social groups, levels of formality, situation, etc. The idea of system, pattern and structure is an important one in considering sociolinguistic research into language use, and for predicting the types of language use one can expect given certain linguistic and social variables.

The idea of "the ethnography of speaking," as used by Hymes (1972), is a handy one for dealing with speech as systematic.

> A vast portion of verbal behavior in fact consists of recurrent patterns, of linguistic routines. Description has tended to be limited to those with a manifest structure, and has not often probed for those with an implicit pattern (p. 127).

Hymes is critical of the neglect of the situation of speech in linguistic studies. Neglect has arisen because of several assumptions on the part of linguists. Speech has been assumed to be without prior system, its functions assumed to be universally the same. It is desirable now to reexamine these assumptions: the speech of a group constitutes a system; speech and language vary cross-culturally in function; the speech activity of a community is the primary object of attention.

> A descriptive grammar deals with this speech activity in one frame of reference, an ethnography of speaking in another. So (what amounts to a corollary, . . .), the latter must in fact include the former (p. 132).

The development of the sociolinguistic concept of "system" is attributed to Firth by Halliday (1973a), and is interpreted as the set of options that is specified for a given environment. By making use of this notion, Halliday believes that we can describe language in the form of behaviour potential.

> In this way the analysis of language comes within the range of a social theory, provided the underlying concepts of such a theory are such that they can be shown to be realized in social context and patterns of behaviour (p. 51).

Implicit in the above paragraph is the predictability of language functions and behaviour. Halliday (1974) makes this explicit when he speaks of all language as functioning in contexts of situation, and is thus relatable to those contexts. The question should not be what peculiarities of vocabulary, grammar or punctuation can be accounted for by situation, but rather which kinds of situational factors determine which kinds of selection in the linguistic system.

> The notion of register is thus a form of prediction: given that we know the situation, the social context of language use, we can predict a great deal about language that will occur, with reasonable probability of being right. The important theoretical question then is: what do we need to know about the social context in order to make such predictions? (p. 33)

a. Style as Choice

Speech always entails a choice of linguistic means, either deliberate, spontaneous, or automatic. "Whether one speaks, and, if one speaks, the way in which one speaks, are elements of choice and hence of the meaningfulness of language" (Cazden et al., 1972, p. xxiii).

Enkvist, Spencer and Gregory (1964) use the terms "pragmatic choice" or "pragmatic selection" to describe the choice of a meaning for an utterance, or of something to say. It involves the decision of what a person wants to convey in his linguistic message. Enkvist identifies four levels or types of stylistic selection: pragmatic, grammatical, stylistic, nonstylistic (Enkvist et al., 1964, p. 36). Enkvist's model (Figure 1) gives grammatical choice a position higher than stylistic choice. The order of the screens must be reversed if we think of grammatical choice as subordinate to stylistic. "The grammar screen must then be placed within the context" (Enkvist et al., 1964, p. 36).

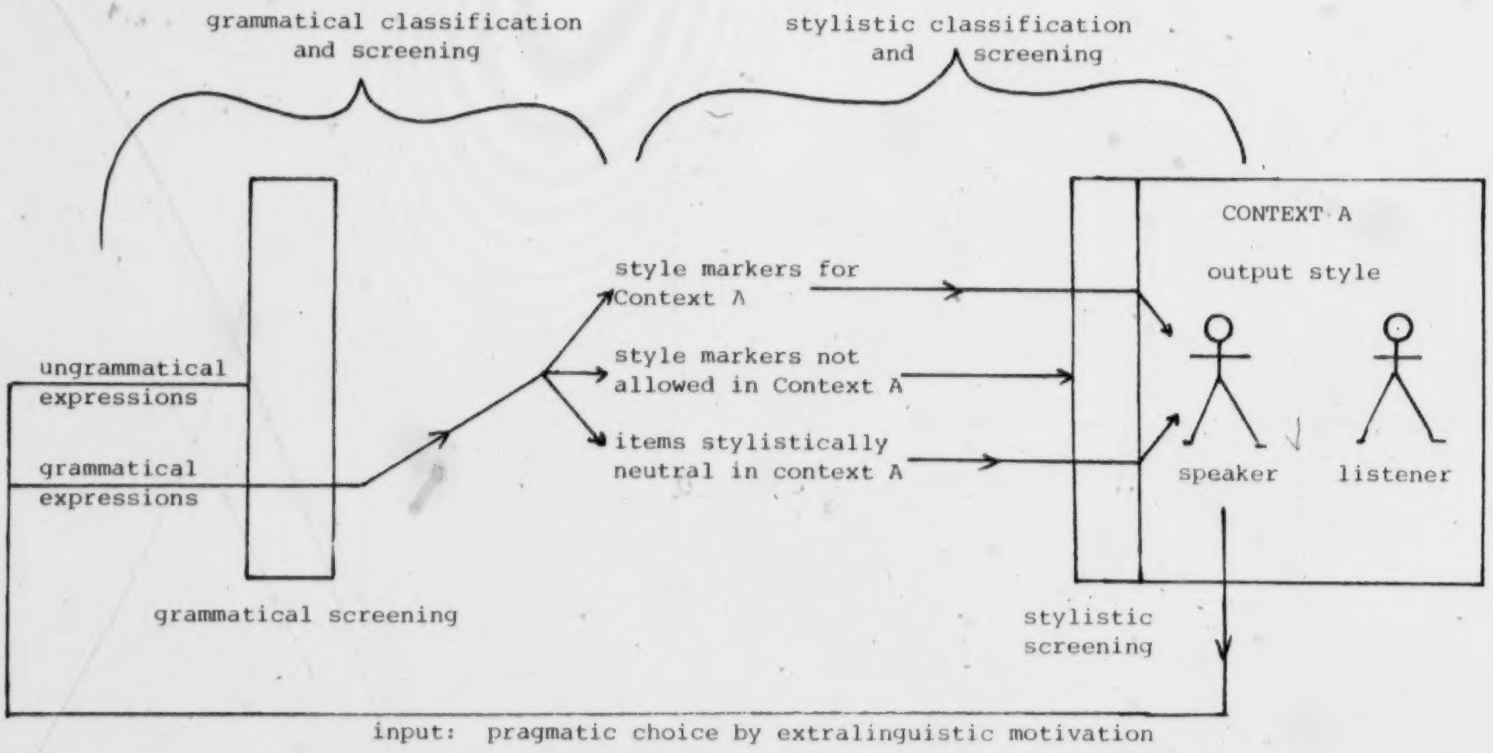

grammatical classification
and screening
stylistic classification
and screening
ungrammatical
expressions
grammatical
expressions
grammatical screening
style markers for
Context A
style markers not
allowed in Context A
items stylistically
neutral in context A
CONTEXT A
output style
speaker
listener
stylistic
screening
input: pragmatic choice by extralinguistic motivation

Figure 1

ONE VIEW OF STYLE AS CHOICE

Enkvist et al. state that stylistic choice exists on levels other than the lexical. It may involve phonetic features, morphemes, words, phrases, clauses, sentences, or even larger units. Stylistic choice, they say, is one between items that mean roughly the same. Nonstylistic choice involves selection between different meanings.

b. Language and Speech as Pattern

Cazden (1966) recognizes pattern in speech and argues that speech activity is not the same from society to society, nor from group to group within societies. She states that how speech is patterned is the focus of the interdisciplinary study of the ethnography of communication, thus borrowing Hymes' concept.

Language is likewise regarded as a form of activity by Halliday, McIntosh and Strevens (1964). "Specifically, it is a form of activity of human beings in societies; [sic] and it has the property of being patterned" (pp. 4-5). Therefore, studying how language works means studying the patterns, and the items which enter into them, how people operate these patterns and items, how the patterns persist at different times, in different places and among different groups of people.

In talking about speech components, Hymes (1967b) sheds some light on structure, and therefore, pattern. He states that the criterion for registering a speech component is that it should be part of the definition of a rule of speaking. "Rules of speaking, in other words, entail structured relationships among two or more components" (p. 21).

c. Language and Speech as Habit

Possibly one of the first sociolinguists, along with J. R. Firth, was Malinowski. Writing some forty years ago his comments are historically illuminating. He saw language not as a tool but as a habit. He also argued against language as an institution, which ". . . brings language as a fixed product into the realm of material achievements and leads us away from the study of speech customs within the living context of human activities" (1964, p. 64).

Jesperson (1925) also viewed language as a set of habits, or habitual actions, with each word and sentence spoken in a complex action of the speaker. Most of these actions are determined by what the speaker has done previously in similar situations which, in turn, is dependent chiefly on what he has habitually heard from others. But the speaker has to adapt these habits to meet new situations, therefore he cannot be a mere slave to habits, as he needs to vary them to suit varying needs. This, in time, may lead to new forms and new habits.

Habits are not talked about today among sociologists, linguists and psychologists because many people link discussion of habits with radical behaviorism, but the notion of pattern and structure in speech is implicit in these early writings.

6. FUNCTIONS OF LANGUAGE

It is difficult to separate functions of language from such aspects as register and style, simply because these are a function of language, but the sections to follow will be elucidated by a general discussion of language functions. Since Halliday (1973a, 1974) has been instrumental in defining and identifying functions of language, this discussion will centre on his work.

Halliday identifies two main types of approach, in the psychological and psycholinguistic spheres, to the question of language development, namely the nativist and environmentalist positions (1974, pp. 13-15). The nativist view is that there is a specific language-learning faculty, distinct from other learning faculties, and this provides a blueprint of the structure of language in the infant. The environmentalist view sees language learning as not fundamentally distinct from other kinds of learning. The child depends on his environment, both for the language he hears and the contexts in which it is uttered.

The nativist view "reflects the philosophical-logical strand in the history of thinking about language, with its sharp distinction between the ideal and the real" (1974, p. 14), along the lines of Chomsky's notion of "competence" and "performance." The environmentalist view "represents the ethnographic tradition, which rejects the distinction of ideal and real, defines what is grammatical as, by and large, what is acceptable, and sees language as relations based on meaning, with meaning defined in terms of function" (1974, pp. 14-15).

The nativist view, that the structure of children's language is disconnected and ungrammatical, is patently false. The ordinary everyday speech of the small child is "fluent, highly structured, and closely related to the non-verbal context of situation" (1974, p. 15). Halliday found few deviations in the language of a small child, and found all sequences well formed and whole, and acceptable to any grammarian.

In a publication devoted to the functions of language, Halliday (1973a) notes a correspondence between what has happened in the course of the evolution of language, and what happens in the development of language in the individual. The demands made on language, both historically and ontogenetically, have constantly expanded, and the language system has been shaped accordingly. "There has been an increase in the complexity of linguistic functions, and the complexity of the language has increased with it" (1973a, p. 98).

Halliday (1973a, pp. 99-101) writes of three "macro-functions" or uses of language. The Ideational is that part of the grammar concerned with the expression of experience, including both the processes within and beyond the self—the phenomena of the external world and those of consciousness—and the logical relations deducible from them. Two subcomponents are the experiential and the logical. The Interpersonal component is the grammar of personal participation, which expresses the speaker's role in the speech situation, his personal commitment and his interaction with others. The Textual component is concerned with the creation of text. It expresses the structure of information, and the relation of each part of the discourse to the whole and to the setting.

These macro-functions are the most general categories of meaning potential and are common to all uses of language. With minor exceptions, whenever and whatever a speaker uses language to convey a purpose, all of these components of the grammar are drawn upon.

> An amorphous and indeterminate set of 'uses of language' is partly reducible to generalized situation types, ,the social contexts and behavioural settings in which language functions. For any of these situation types, we seek to identify a meaning potential, the range of alternatives open to the speaker in the context of that situation type; these are expressed as semantic networks within which meaning selections are made (1973a, p. 101).

Firth (1964a) was among the first, along with Malinowski, who sought to identify the functions of speech. He included Phatic communication (solidarity), Pragmatic efficiency (accompanying work), Planning and guidance, Address, Greetings, farewells, adjustments of relations, etc., Speech as a commitment (courts, promises). His view of function was the social value of the act.

Barker (1944-45) devised a sociological scheme of language functions with a group-defining function and a group-relating function. This view of language is very much aligned with Halliday's view of language and social man. It is useful in the study of how language forms and maintains social groups and how language functions to define the roles of individuals within and between groups.

7. ROLES AND REPERTOIRE

The two terms have been used in earlier sections but a detailed account of their employment in sociolinguistics is undertaken here. The two concepts are inextricably interrelated because, as Doughty, Pearce and Thornton (1972) state, a repertoire consists of all the roles a person acquires. A repertoire does not remain unchanged, though some roles do throughout life, for example, being a son or daughter, or living in a particular geographical region. Roles acquired in an occupational context are likely to have much less effect on an individual than other roles, and their number and variety is much more open to change. A person's repertoire of roles represents his present social self, but that self is also a product of his social history as an individual.

A person's repertoire is also a reflection of how successfully he has learned to use language for entering into and monitoring relationships. "Just as the range of roles it contains represents his cumulative experience of relationships, so, from a linguistic point of view, that range represents the scope of his competence for languaging social action" (Doughty et al., 1972, p. 69). The roles in one's register represent the current experience of relationships, the sum of one's present activities as a member of a family, community, and society. It makes up the register of possibilities one sees open to one's self as a social being. Linguistically, this experience represents one's current experience of using language. Socially, one's repertoire of roles refers to the number and character of the roles the individual enters into at any time, of which there will be a limit.

> A man is always aware of 'audience' when he plays a particular part, but 'audiences' will vary in their power to influence his interpretation of a role. Who a man is, where he lives, what he does, however, determines the range of 'audience' to which he is susceptible (Doughty et al., 1972, p. 76).

Doughty et al. (1972, pp. 86-89) set out four types of social context for exploring the diversity of roles. (1) Geographical—groups that come into being through the forces of proximity or locality. (2) Familial—membership of a family is a life-long matter, whatever modifications occur as a man grows up. (3) Occupational—

can provide a number of different groups for one individual. In schools, individual classes constitute such groups. "The average pupil belongs to a continually changing cluster of groups within the school" (p. 87). (4) Public—in some cases membership in a public group will completely dominate a person's existence. (5) Personal—only really exists when individuals deliberately choose to come together to share common interests.

Roles are modes of acting allotted to individuals within a society. Gumperz (1962, p. 31) thus defines roles, and this implies that roles are adopted rather than developed, and that roles cannot exist in the absence of the social situation, except as deliberate usage for predetermined motives, for example, humour. Role behaviour changes with the context of situation or environment.

Fishman (1965) considers dyads within a domain a productive way to look at role-relations. This view of role-relations recognizes the interacting members and the participants, and that there are hearers as well as speakers in the relationship. He gives as examples of such role-relations pupil/teacher and judge/defendent. Role-relations refer to specific domains (p. 77).

8. REGISTER

This section will deal mainly with the theoretical discussions surrounding the notion of register, and will focus on the British writers who have made contributions to this field of language study. British linguists have been prominent in their attention to register. The following section on Approaches to Register will delve into the various methodologies and frameworks put forward to study register or speech styles.

This section adds to what has already been introduced in section 1(b) at the beginning of this chapter. Fishman (1972a) states that we need the category of register when we want to account for what people do with their language. "When we observe language activity in the various contexts in which it takes place, we find differences in the type of language selected as appropriate to different types of situation" (pp. 149-150).

In the above quotation the idea of style of speech being a choice again is evident. The event or state of events being talked about does not determine the choice, but the convention that a certain kind of language is appropriate to a particular use. With non-native speakers of a language the choice of items from the wrong register, and the mixing of items from different registers, are among the most frequent mistakes made. Humour in language often depends on the deliberate, or non-deliberate, inappropriate choice and the mixing of registers.

Ure (1969, 1971) and Fishman (1971b, p. 44) state that register is reflected in lexicon, since different topics are required in different settings. In this sense it can be understood that slang is a register variation in that the alternatives are primarily lexical. In slang the form is not necessarily different, but in sacred or slang contexts, they take on a different meaning.

Halliday (1974) looks at register as part of the speaker's "communicative competence" (pp. 32-33). The speaker knows how to distribute lexical items in a text according to different kinds of language use. Here he is in agreement with Ure and Fishman. Halliday sees some writers on register as looking at the features of language determined by register, and having come up with instances of near-synonymity where one word differs from another in level of formality, rhetoric, or technicality (for example, chips for French fries). He views these as commonplaces that lie at the fringe of register variation.

Hasan (1973) states that a particular register can be characterized by reference to some syntactic, lexical or phonological patterns. Register variations thus differ language-internally by virtue of distinctive formal patterns so that the totality of distinctive patterns for any one particular register is not identical with that of any other register.

a. Practical Registers

Aside from the theoretical discussions of registers little has been done in the isolation, identification and application of registers. Ure (1969, pp. 108-114) developed what she called "practical registers" which is the language-in-action register. She developed this for teaching English to foreign language speakers who need language for everyday practical purposes. It is also useful for people bent on acquiring technical knowhow. Ure discovered some important aspects of register in her work with practical registers. Circumstances affecting our choice of register can be of several different kinds, among them medium, personal relations, and subject matter.

Medium is either spoken or written. Spoken medium can be either monologue or conversation, but there is no clearcut division, rather a series of graded possibilities, a cline. Feedback is an important aspect of medium. Another distinction is that of preparedness versus spontaneity, and this along with feedback is independent of spoken or written contrast.

There is also a social function, involving information or goodwill. Language is also either involved in the situation (for example, making a cake), or outside the situation (for example, reading the news on television). These distinctions can also be represented as a cline or range. Fiction favours a use of language at the extreme of the "outside" direction.

There are some cross-classifications of functions. Language used in a practical action function is almost always conversational in mode. We may group together a set of social functions that involve persuasion, instruction, and discussion. These may involve either action or secondary-situation, for example, a series of lessons to the same class would all rate as instruction, but they would not all come equally near the action-situation end of the functional involvement cline. ". . . in a way, action-situation language also comes before secondary-situation as a result of experience of the use of language operating in real situations directly" (1969, p. 112).

b. Lexical Density

Arising from Ure's work with practical registers is the concept of lexical density, which Ure (1971) adopted as a measure when describing the situational language in her register work in the teaching of English as a second language. The concept of lexical density is thus a potentially important one for differentiation between different registers, speech styles or situational language uses.

Halliday (1974, p. 32) describes lexical density as the proportion of lexical items, or content words, to words as a whole in a text. Lexical density is a function of the medium, spoken or written, with written language having a higher lexical density than speech. Lexical density is also dependent on the social aspect of language with pragmatic language, or language in use, having the lowest lexical density of all. Halliday also goes on to state that written language tends to be simpler than spoken language in its grammatical organization. Speech, especially informal speech such as casual conversation, displays complexities of sentence structure that would be intolerable, because unintelligible, in written language.

c. Contextual Meaning

An important aspect of register is context, and the context of situation has already been discussed in 1(a). The idea of context reappears often in the writings of sociolinguists and literary stylists. Enkvist, Spencer and Gregory (1964) write that language has both a formal and a contextual meaning, and therefore one must look at the consequences of seeing language as part of human social behaviour. Language events obviously do not take place in isolation from other events. "Any piece of language is therefore part of a situation, and so has a context, a relationship with that situation" (p. 68).

Ellis (1966) uses the term in such a way that its full sociolinguistic import is evident. He states that contextual meaning relates form to situation. It is not a relation within a level, but between levels. All formal items, both grammatical and lexical, have contextual meaning. "Situation is extra-linguistic; as a general category, unlike context, it is the same for all languages" (p. 81). Ellis relates contextual meaning to register thus:

> By register itself, a linguistic, not situational category, is meant a division of idiolect, or of what is common to idiolects, distinguished by formal (and possibly substantial) features and correlated with types of situation of utterance . . . (p. 83).

Ellis sees register as a subdivision of language-variety, which is distinguished from local or social variety by its varying with immediate features of the situation of utterance, whereas local or social variety are invariant in all situations. In so far as linguistic material ascribable to local or social origin is used in correlation with immediate features, it has become register. Register-range, as total idiolect, is locally and socially conditioned.

Varieties distinguish one idiolect from another, on scales of (1) local variety (dialect, accent)—local origin of speaker, or of components of his language, and (2) social variety (local dialect, degree of accent, standard or substandard—status-cum-(social) origin of speaker. Varieties within idiolects, which are registers, vary on scales of (1) field—subject matter; (2) role-variety—social, role of performance, for example, conversation, literature; (3) formality—relationship between participants, cf. Joos' five styles; (4) mode—medium of utterance and degree of feedback from addressee(s), for example, written, tape recorded, broadcast, televised, epistolary, telephonic, note-passing, normal oral colloquy.

By register-choice Ellis means:

> . . . the particular register out of the performer's range to which the utterance may be assigned (irrespective of how deliberate or unconscious the selection may have been), the specificness of the assignment depending on the delicacy of the analysis, and the analysis resting in the first place on linguistic features but in the statement correlating with situational ones (p. 83).

Ellis also gives an example of contextual meaning analysis.

Utterance: How do you do!

Register range: normal (educated)

Register-choice: conversation (as to role)

greeting (as to field, and role-restricted variety)

formal (as to formality scale)

spoken colloquy (as to mode).

d. Expressive Devices

Another important concept of register is the occurrence of different means of expression. To discuss this concept Ullmann (1964) uses the term "expressive devices." "Expressiveness" covers the wide range of linguistic features which have in common the fact that they do not directly affect the meaning of the utterance, the actual information which it conveys.

> Everything that transcends the purely referential and communicative side of language belongs to the province of expressiveness: emotive overtones, emphasis, rhythm, symmetry, euphony, and also the so-called 'evocative' elements which place our style in a particular register (literary, colloquial, slangy, etc.) or associate it with a particular milieu (historical, foreign, provincial, professional, etc.) (p. 101).

Ullmann is addressing written language and in particular literature, but his clarification of register is equally appropriate to speech.

The best sources for overall discussion of the idea of register, and of register from the sociolinguistic perspective, are in Ellis and Ure (1969, pp. 251-259), Davis (1968, pp. 107-122) and DeStefano and Rentel (1975, pp. 328-337).

9. APPROACHES TO REGISTER

This section presents a variety of methodological approaches to the study and analysis of speech styles. Many have been gleaned from scholars whose interests lie in analysis of written language and literature, and are included because they can contribute to the understanding of the functions and uses of speech.

a. Abstract-Concrete Dichotomy

Admonishing against a Bernstein type of approach to language codes, Leacock (1972, pp. 111-134) states that the abstract-concrete dichotomy is a false one, and that the linguistic division between a concrete and abstract concept of language is at the very least unclear, if it exists at all. Premature assumptions about language and thought have arisen from the set of inferences that distinguish language dialects or speech styles as either abstract or concrete. The investigator agrees with Leacock that the notion of the abstract style characterizing the speech patterns of middle class speakers compared with the concrete style of lower class speakers is a false one. Such linguists are equating register, speech style and code, which is not only definitely misleading but ignores the context of situation upon which register is so solidly based.

b. The Five Clocks

Joos (1960, 1967) uses the word "style" in a metalinguistic sense in that an extrinsic explanation of styles links them with belonging to a 'set' in psychology, in the sense that they are intentions. He states that the number of styles should preferably be rather small. We cannot segregate items singly into styles by the criteria of phonology, grammar or semantics. The membership of each style-group of items must be linguistically heterogeneous.

> . . . if we ever get a believable description of English styles, the several styles will be found to be correlated to an equal or greater number of sociologically definable occasions; . . . (1960, p. 110).

Joos states that it is routine to alternate, within a single discourse, between two styles which are neighbours on the scale he describes.

> The social occasion and its adequate style are dynamically correlated, of course: in one direction of this correlation, the speaker uses the style that suits the occasion; in the other direction, the speaker defines the occasion for the listener (and for himself) by his "choice" of style (1960, p. 111).

Joos developed five styles which he details in his book The Five Clocks (1967). The first four of these five were used to construct the task situations for this study. The five are the intimate, casual, consultative, formal, and frozen. They range along a continuum of intimacy.

The consultative style is probably the one in which adults most engage. It is indicative of conversation between persons who have a limited shared background. It features free and easy participation of both speaker and listener. Sentences are complete, background information supplied.

Formal style is characterized by complete sentences that reflect a logical development of thought and careful planning. Background information is provided, and speech is extemporaneous as opposed to impromptu, which is characteristic of intimate, casual, and consultative styles.

Frozen style is more characteristic of writing than speech, is reserved for the most formal occasions when spoken, and is then frequently read. Such things as logical development of thought, careful planning, attention to stylistic features, word appropriateness, and rules of usage, come into play.

Casual style assumes a shared background. Sentences are not necessarily complete. There is free and easy participation of both speaker and listener, and unconventional English such as slang and profanity mark this style.

Intimate style reflects the use of language that operates almost at the thought level of both speaker and listener. It is characterized by an economy of words and a high incidence of significant nonverbal communication, such as gestures and facial expressions. It is characteristic of people who know each other very well.

A feature distinguishing formal from consultative style is that in the former the listener's active participation drops out. All styles are in fact responsive to group size. A speaker using consultative style might unconsciously find himself shifting to formal when his audience increases in number.

c. Codes and Styles

Kochman (1972) applies Bernstein's codes to the range of styles developed by Joos, to arrive at the following scale (p. 236):

restrictive ⟵————————————⟶ elaborated

intimate —— casual —— consultative —— formal —— frozen

Onto this scale he also projects the notion of high and low context, developed by Erickson (1969). High context evokes a kind of behaviour that suggests a high degree of familiarity with the situation and the people in it. Low context elicits behaviour that suggests an unfamiliarity with a situation and the people in it.

> The range of restrictive use of language (intimate-casual, moving into consultative) is characteristic of a high to a diminishing high context; the range of elaborated use of language (frozen-formal, moving into consultative) is characteristic of a low to a diminishing low context. The home, playground, and street corner would constitute a high context. An employment office would constitute a low context (p. 236).

d. Field, Mode and Tenor of Discourse

These three components of style form the basis of the English approach to register. They appear in the literature of Enkvist, Spencer and Gregory (1964, pp. 85-89) who identify five ways in which a text may be placed. First, is the historical, the language range of the period. Second, ~~is~~ dialect range, the chosen dialect. Then follow the three inter-related dimensions of (1) field of discourse, (2) mode of discourse, and (3) tenor of discourse which Halliday, McIntosh and Strevens (1964) subsume under the term register.

Enkvist et al. define the field of discourse as that which relates to the subject matter of a text and the linguistic features associated with it. Mode accounts for the linguistic differences which result from the distinction between spoken and written discourse. Tenor is concerned with the degree of formality (cf. Joos' five styles) in the situation, which can generally be said to depend on the relationship between the speaker and hearer. This dimension should be seen as a continuum. The field, mode and tenor are inter-related and interacting.

These three dimensions are broadened by Doughty, Pearce and Thornton (1972). Field of discourse extends beyond the general concept of that of subject matter to refer to what the participants in the context of situation are actually engaged in doing. It includes the institutional setting in which a piece of language occurs (Doughty et al., 1972, p. 185). Since field largely determines the content of what is being said, it is likely to have a major influence on the selection of vocabulary, and also on the selection of grammatical patterns.

Under field of discourse Halliday, McIntosh and Strevens (1972) distinguish technical registers which lend themselves to language activity of the discussion type, where there are few related nonlinguistic events, and nontechnical registers to functional or operational language activity, in which language can be observed as a means of achievement. "Perhaps our most purely operational language activity is 'phatic communion', the language of the establishment and maintenance of social relations" (p. 153).

Mode refers to the channel of communication adopted (Doughty et al., 1972, p. 185). The underlying question is what function language is being used for. Language can be to persuade, to soothe, sell, control, explain. Language can be informative, didactic, argumentative, or any one of a number of rhetorical modes of discourse (Halliday, 1974, p. 49). Mode of discourse also influences the speaker's selection of mood, the kinds of statements he makes—fearful, hesitant, gnomic, qualified, reassertive, asking questions.

Tenor or style refers to the relationship between participants, not merely variation in formality, but such things as the degree of permanence in the relationship and the degree of emotional charge in it (Halliday, 1974, p. 34). Examples of role relationships are teacher/pupil, parent/child, child/child in the peer group, doctor/patient, customer/salesman, casual acquaintances on a train, etc.

> It is the role relationships, including the indirect relationship between a writer and his audience, that determine such things as the level of technicality and degree of formality. Contexts of situation, or settings, such as a public lecture, playground or playtime, church service, cocktail party and so on can be regarded as institutionalized role relationships and hence as stabilized patterns of 'tenor of discourse' (Halliday, 1974, p. 50).

Halliday, McIntosh and Strevens (1972, p. 154) make the primary distinction of style into colloquial and polite, and suggest that other divisions could be casual, intimate, and deferential.

The three categories are the features of the context of situation which determine the kind of language used. They determine, in other words, the register, the types of meaning that are selected (cf. Halliday's notion of "meaning potential"), and their expression in grammar and vocabulary. Both choice of vocabulary, largely a matter of the field of discourse, and its distribution in grammatical structure, mainly dependent on the mode, are affected by factors of the tenor of discourse. The types of social relationship, temporary and permanent, between a speaker and his hearers, tend to influence the level of formality and technicality at which the speaker is operating, ". . . and hence lead him to prefer certain words over others and to pitch his discourse at a certain point on the Joosian style scale" (Halliday, 1974, p. 51).

Halliday (1974, pp. 52-53) gives a description of a predictable language setting, that of a novice player being taught a game.

Field: Instruction: the instruction of a novice
  - in a board game (Monopoly) with equipment present
  - for the purpose of enabling him to participate

Mode: Spoken: unrehearsed
  Didactic and explanatory, with undertone of nonseriousness
  - with feedback: question-and-answer, correction of error

Tenor: Equal and intimate: three young adult males, acquainted
  - but with hierarchy in the situation (two experts, one novice)
  - leading to a superior-inferior role relationship

Field, mode and tenor of discourse have become standard concepts among sociolinguists, and their use in the study of register is discussed by Ellis (1965), Philp (1969), and Verma (1969). Chiu (1973a) places the three concepts in perspective in language study in Figure 2.

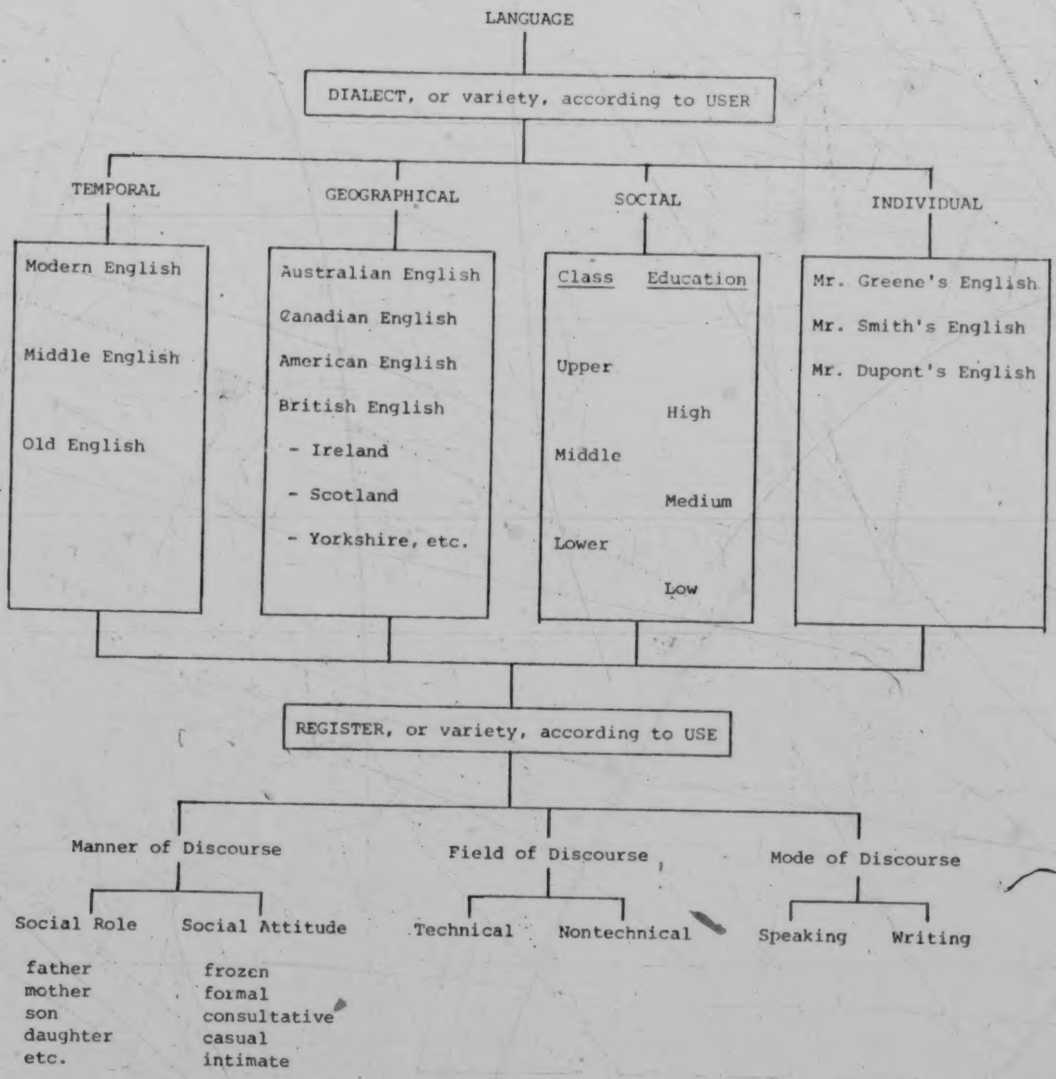

LANGUAGE
DIALECT, or variety, according to USER
TEMPORAL
GEOGRAPHICAL
SOCIAL
INDIVIDUAL
Modern English
Middle English
Old English
Australian English
Canadian English
American English
British English
- Ireland
- Scotland
- Yorkshire, etc.
Class
Education
Upper
High
Middle
Medium
Lower
Low
Mr. Greene's English
Mr. Smith's English
Mr. Dupont's English
REGISTER, or variety, according to USE
Manner of Discourse
Field of Discourse
Mode of Discourse
Social Role
Social Attitude
Technical
Nontechnical
Speaking
Writing
father
mother
son
daughter
etc.
frozen
formal
consultative
casual
intimate

Figure 2

FIELD, MODE AND TENOR OF DISCOURSE IN RELATION
TO REGISTER, DIALECT, AND LANGUAGE

(adapted from Chiu, 1973a)

e. Varieties Differentiation

Gregory (1967) places the categories of field, mode and tenor of discourse in the framework of Halliday's distinction between the user and use of language. His dialectal varieties are distinguished according to user's characteristics, and are what Halliday calls dialect. The diatypic varieties are distinguished according to characteristics of use, which Halliday calls register. The situational categories arise from the study of extra-textual features, linguistic and nonlinguistic, which have high potential relevance for statements of meaning about the texts of language events. The context is made up of correlations of formally described linguistic features, groupings of such features within texts and abstracted from them with those situational features themselves constantly recurrent and relevant to the understanding of language events (pp. 177-178). All dimensions of situation variation that yield variation are clines or continua. (See Figures 3 and 4.)

In Figure 5 the interest is on the relationships involved in the spoken medium, but the interrelationships between the spoken and written medium (modes of discourse) are an important aspect in styles of speech, especially when one considers degrees of formality and variation along a cline.

f. Formal and Informal

In a general account of style Ervin-Tripp (1971) identifies two broad types, formal and informal. Style becomes a formal marker for occasions of societal importance when the personal relationship is minimized (p. 40). Informal style involves linguistic abbreviation,

	Situational Categories	Contextual Categories	Examples of English Varieties (contextual categories)	
user's	individuality	idiolect	Mr. X's English Miss Y's English	Dialectal Varieties*
	temporal provenance	temporal dialect	Old English Modern English	
	geographical provenance	geographical dialect	British English American English	
	social provenance	social dialect	Upper Class English Middle Class English	
	range of intelligibility	standard/nonstandard dialect	Standard English Nonstandard English	

* Dialectal Varieties. The linguistic reflection of reasonably permanent characteristics of the USER in language situations.

Figure 3

SUGGESTED CATEGORIES OF DIALECTAL VARIETY DIFFERENTIATION

(Gregory, 1967, p. 181)

	Situational Categories	Contextual Categories	Examples of English Varieties (descriptive contextual categories)	
user's	purposive role	field of discourse	Technical English Nontechnical English	Diatypic Varieties*
	medium relationship	mode of discourse	Spoken English Written English	
	addressee relationship	tenor of discourse		
	(a) personal	personal tenor	Formal English Informal English	
	(b) functional	functional tenor	Didactic English Nondidactic English	

These categories of diatypic variation to be regarded as hypothetical.

*The linguistic reflection of recurrent characteristics of user's USE of language in situations.

Figure 4

SUGGESTED CATEGORIES OF DIATYPIC VARIETY DIFFERENTIATION

(Gregory, 1967, p. 185)

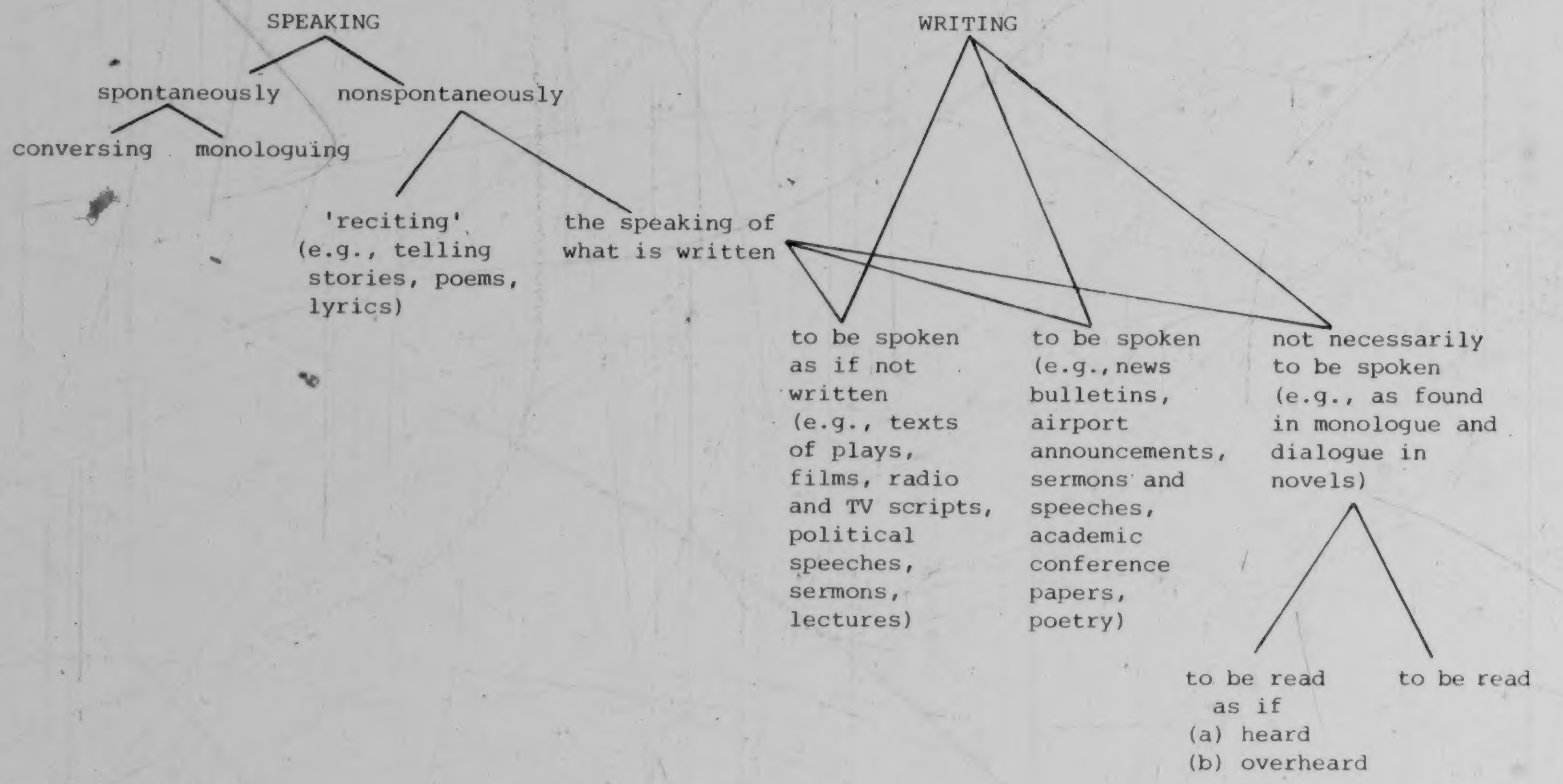

SPEAKING
spontaneously
nonspontaneously
conversing
monologuing
'reciting' (e.g., telling stories, poems, lyrics)
the speaking of what is written
WRITING
to be spoken as if not written (e.g., texts of plays, films, radio and TV scripts, political speeches, sermons, lectures)
to be spoken (e.g., news bulletins, airport announcements, sermons and speeches, academic conference papers, poetry)
not necessarily to be spoken (e.g., as found in monologue and dialogue in novels)
to be read as if (a) heard (b) overheard
to be read

Figure 5

SUGGESTED DISTINCTIONS ALONG THE DIMENSION OF SITUATION VARIATION CATEGORIZED AS USER'S MEDIUM RELATIONSHIP

(Gregory, 1967, p. 189)

or ellipsis which, from a grammatical standpoint, is more complex than nonellipsis. Semantic compression is a feature of casual speech among intimates (pp. 41-43).

In an analysis of the interaction of language, topic and listener, Ervin-Tripp (1972, pp. 193-197) sets out several components which bear similarity to those of Hymes (to follow).

1. Setting: a sense of locale (time and place), and a sense of situation (when people encounter one another).
2. Participants: status in society, sex, age, occupation; roles relative to one another (employer-employee, husband-wife); roles specific to the social situation (teacher-pupil, hostess-guest). Also includes the addressor-addressee relationship, and sometimes an audience. The role of speaker is rarely distributed in equal time to all participants.
3. Topic: the content or referent of speech.
4. Functions of the interaction: (a) requests for goods, services, or information; (b) requests for social responses; (c) offering information or interpretation; (d) excessive monologues (expressions of joy, sorrow, anger, talking to oneself, muttering); (e) routines (greetings, thanks, apologies, offers of service); (f) avoidance conversations (coffee breaks, bus stop discourse).

These six functions were developed to account for the interaction of dyads. They are not intended to cover continuous discourse, but initiations. The criterion of classification is the hearer response which could terminate the interaction to the satisfaction of the initiator. Formal features of communication are:

a. Channel - spoken language, writing, telegraphic signals, gesturing signals;

b. Code or variety - vernacular, superposed variety;

c. Sociolinguistic variants - free variants or optional variants within a code, that is, two different ways of saying the same thing;

d. Nonlinguistic vocal signals - include the range of properties called paralinguistic which lack the arbitrary properties of linguistic signals.

Ervin-Tripp comments that the concern of linguists has primarily been with codes rather than with the other three classes above of formal variation.

g. S-P-E-A-K-I-N-G

This is the acronym used by Hymes to organize the components of the analysis of discourse data in social situations. To begin with Hymes (1964a, 1964b, 1972) identifies seven components or factors in speech events as making up a descriptive analysis: (1) Sender (source, addressor); (2) Receiver (destination, addressee); (3) Message Form (kinds of utterance, such as question and commands; genre, style); (4) Channel (speaking, writing, instrumental, sung, body motion); (5) Code (languages, dialects, levels, varieties);

(6) Topic; (7) Setting (scene, situation, Malinowski's context of situation). This set of seven types of factors is an initial (etic) framework.

Hymes (1972, pp. 117-120) adds seven broad types of functions which correspond to the seven types of factors above: (1) Expressive (Emotive); (2) Directive (Conative, Pragmatic, Rhetorical, Persuasive); (3) Poetic; (4) Contact; (5) Metalinguistic; (6) Referential; (7) Contextual (Situational). More than one function is usually present in a given speech event; it is not at all to be assumed that certain features are exclusive of a single function.

The focus on the part of the linguist may be on any one of the components of speech (Gumperz and Hymes, 1964). When the focus is on the addressor, for example, there is identification of the source, an expression of attitude toward one or another component or toward the event as a whole, or excogitation (thinking aloud). Such functions may be intended, attributed, conscious or unconscious.

The various components are organized and arranged in the code word SPEAKING (Hymes, 1967b, 1971).

(S) Setting or Space - time and place of speech event, also psychological setting and cultural definition as a type of scene

(P) Participants, or Personnel - addressor, addressee, audience, etc.

(E) Ends - ends in view (goals, purposes), or ends as outcomes (results).

(A) Art Characteristics - the form and content, or the message-form and topic, of what is said.

(K) Key - the tone, manner or spirit in which an act is done.

(I) Instrumentalities - (a) Channel: the choice of oral, written, telegraphic, or other medium;

(b) Code or subcode: choice of language, dialect or sociolect.

(N) Norms of Interaction and of Interpretation - the belief system of the community, specific behaviors and properties that may accompany acts of speech.

(G) Genres - categories or types of speech acts and speech events, for example, conversation, curse, prayer, lecture, sales pitch, etc.

Cooper (1969, p. 202) structures the relationships among sociolinguistic components in a somewhat different, but not necessarily less valuable, way than does Hymes. In Figure 6, many components are the same as Hymes and others have identified. Value Cluster is the set of community values; Domain is the cluster of social situations; Network Type (open or closed) is the cluster of role relationships; Social Situation is the encounter defined by the interaction of setting, time, and role relationships; Role Relationships is the act of culturally defined mutual rights and obligations; Interaction Type can be personal or transactional.

h. Fishman

Fishman (1965) uses many of the same components of speech events, and the same terms, as do Hymes, Gumperz, Cooper, Cazden, Ervin-Tripp, and other sociolinguists. (a) Group, Situation, Topic.

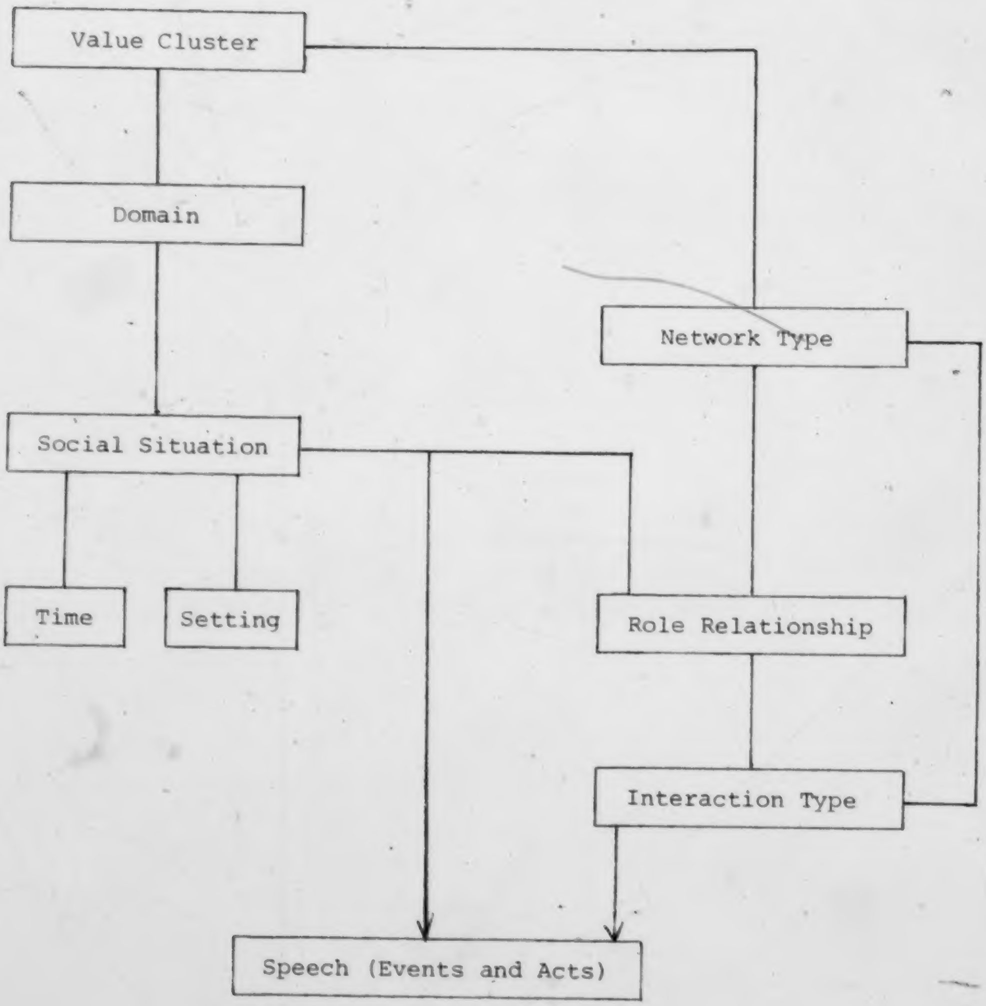

Value Cluster
Domain
Network Type
Social Situation
Time
Setting
Role Relationship
Interaction Type
Speech (Events and Acts)

Figure 6

RELATIONSHIPS AMONG SOME CONSTRUCTS EMPLOYED IN SOCIOLINGUISTIC ANALYSIS

(Cooper, 1969, p. 202)

One of the controlling factors in language choice is group membership. This factor must be viewed also in the subjective sociopsychological sense of reference group membership. (b) Situation, or Setting. Situations may be restricted with respect to the participants present, the physical setting, the topics and functions of discourse, and the style employed. Situational styles pertain to considerations of intimacy-distance, formality-informality, solidarity-nonsolidarity, status or power, equality-inequality, etc. (c) Topic. Under some circumstances, even when reference group and situation agree in requiring a particular style, it is not uncommon to find that topic succeeds in bringing a different style to the fore.

i. Bernstein

Although Bernstein (1964) links his definitions of speech forms to contexts of social situations, they are still basically codes, being much more global than register or style. But his concepts of "now-coding" and "highly-coded" have sociolinguistic import.

There is the "now-coding utterance," one in which speech is specially and often newly created to fit a particular referent. There is also the "highly-coded utterance" which consists of attaching ready-made terms or phrases as well-organized sequences to designate a referent (for example, comments about the weather; the opening gambit at a cocktail party).

An individual will shift from one type of utterance to another depending on the context of a social situation. According to Bernstein, a system of communication dominated by highly-coded utterances is the pure form of a public language, or restricted code. A system that permits and encourages now-coding utterances, or one where they may be frequently signalled and elicited, is the pure form of a formal language, or elaborated code (p. 252).

j. Jakobsen

Jakobsen (1960) sets out six basic functions of verbal communication and six corresponding "schemes" of the functions. In this he is very close to Hymes (1972), who uses seven broad types of functions and seven corresponding types of factors. The corresponding schema of the functions are shown in parentheses.

Context (Referential)

Addresser Message (Poetic) Addressee

(Emotive) Contact (Phatic) (Conative)

Code (Metalingual)

The diagram can be understood thusly: focus on the message for its own sake is the poetic function of language. Focus on the addresser evokes the emotive or expressive function, which aims at a direct expression of the speaker's attitude toward what he is speaking about.

k. Hasan

Hasan (1973) used the British terms to describe register, but with some additions and one notable deletion. She talks of five factors which form the total set correlating with the varieties of register. (1) Subject-matter of discourse. This factor controls the range of the lexicon from which selection may be made. (2) Situation-type for discourse. (3) Participant roles within discourse. Roles are always socially defined positional roles, and hence involve role-relationships. In some respects the factor of personal distance is built into the meaning of the items of a set, for example, intruder, stranger, acquaintance, friend. "All things being equal, the participant roles and personal distance together act upon the lexicon and the syntax of a given register" (pp. 277-278).

Hasan states that as the institutional aspect of role is stressed, and personal distance increases, the more likely it is that high-level semantic components such as positive/negative tentativeness, and positive/negative uncertainty, would be relevant to the text, the positive or negative sign signifying the dominated and dominating role. This method of analysis would apply to whole statements.

(4) Mode of discourse. Most effectively reflected in the mood choices of the clauses in the text. It is possible to make predictions regarding structural characteristics associated with different types of mode. (5) Medium of discourse. Affects the syntactic choices of a text, with spoken texts generally displaying greater complexity than written ones.

Hasan avoids the use of the term tenor of discourse. She thinks it is a particularly suitable term to refer to the "tonal quality" of texts in various varieties. "The tonal quality itself is the product of the inter-action of the five factors listed and discussed above" (p. 281).

1. Functional Styles

Butler and Hartmann (1976) categorize components of style according to their function in the standard language. Their classification scheme is as follows:

A. According to the specific purpose of the response:
   1. matter-of-fact communication, information
   2. exhortation (appeal), suasion
   3. general explanation (popular)
   4. technical explanation (exposition, proof)
   5. codifying formulation

B. According to the manner of the response:
   private - public
   oral - written
      oral: 1. private: (monologue) - dialogue
            2. public: speechmaking - discussion
      written: 1. private (diary)
               2. public: (a) notice, poster
                          (b) journalistic
                          (c) book writing (magazine writing)

At this point in the discussion of the literature it is necessary to draw together important ideas from the sociolinguistic literature and to focus them on educational issues. The major section to follow attempts to form the links between sociolinguistics and educational aspects of language.

10. SOCIOLINGUISTICS AND EDUCATION

In his Introduction to Cazden et al. (1972), Hymes makes the comment that it is conflict and confusion as to norms of interpretation that is the root of much of the difficulty in classrooms today. Community norms of interpretation are embodied in speech.

> To a considerable extent, then, the use of language that is of concern in the classroom has to do with stylistic or social, rather than referential, meaning. It is not that a child does not know a word, but that he pronounces it in one social context, rather than another (p. xxx).

The fact that community norms of interpretation are embodied in speech leads us to understand that it is not from the language of the classroom that the child learns about the culture into which he is born. Halliday (1974, p. 4) observes that it is the most ordinary everyday uses of language—with parents, siblings, neighbourhood children, in the street and park, in shops, on buses—that transmit to the child the qualities and the nature of social being. Halliday sees the school as a communication network.

> One way of deciding whether the particular type of situation is of interest or not is to consider . . . whether it is of any significance for the socialization of the child. . . . the pupil, in the course of his education, is expected to become sensitive to the use of language in different situation types, and to be able to vary his own linguistic behaviour in response to them (p. 55).

Halliday (1974) sees the ability to use language in abstract and indirect contexts of situation as that which distinguishes the speech of adults from that of children. One can infer that language develops as the child explores and experiences more social contexts, and the broadening of social contacts is concomitant with a broadening of language use and functions. "Learning language consists in part of learning to free it from the constraints of the immediate environment" (p. 29). As experience moves away from the here-and-now, so does language. One would expect that as the child becomes aware of a sense of past and future, language tenses develop which accompany and complement this general cognitive development.

The concept of "high" and "low context" (Erickson, 1969) was elaborated in section 9(c). Kochman (1972) develops this further. He sees the range of familiarity with which a child views his environment and the people in it as tending to promote the development of those language styles which are operative in a high to a diminishing high context, for example, the intimate, casual, and consultative styles of Joos. Kochman believes that it remains for education to teach the mode of language used in reading and writing, which largely reflects the more elaborated styles, that is, formal and frozen:

> Since style, like vocabulary, is not an integral feature of a dialect but one that is responsive to social context (situation, topic), it is important to create low contexts that make the greatest demands on the verbal responses of the child (p. 237).

This idea of Kochman's is expressed more fully and with wider implications by Halliday, McIntosh and Strevens (1964), who in Chapter 8 note three approaches to language teaching. The first, the Productive, is the teaching of new skills. It includes the greater part of foreign language teaching, and certain aspects of native language teaching, of which reading and writing is the most obvious. The Prescriptive approach interferes with existing skills for the purpose of replacing one pattern of activity, already successfully acquired, by another. It is restricted to the native language. A Descriptive approach demonstrates how language works and involves talking about skills already acquired, without trying to alter them, but showing how they are used.

> Unlike prescriptive teaching, productive teaching is designed not to alter patterns he has already acquired but to add to his resources; and to do so in such a way that he has the greatest possible range of the potentialities of his language available to him for appropriate use, in all the varied situations in which he needs them (p. 241).

Halliday et al. (1964) go on to state that the child needs to be taught the varieties of the language appropriate to different situations: the range and use of its registers. The focus of productive language teaching is the range and use of different varieties of the native language, rather than the introduction of new patterns and items.

The need for the extension of children's register range is also stated by Gumperz (1971). The more narrowly defined the sphere of the individual's activities, and the more homogeneous the social environment within which he interacts, then the less his need for verbal facility.

> Recent work . . . indicates that the failure of some self-contained groups to inculcate facility in verbal manipulation is a major feature in failures in their children's performances in public school systems (p. 122).

The importance of register and style variations in language teaching is stated yet another way by Doughty, Pearce and Thornton (1972). They see the role of school and teacher as that of first recognizing variety in spoken language, to discriminate between the casual style of discussion about, for example, means of transportation. Language in use always involves a context of languaging, a message to convey, a role in which to convey it, and an audience to be addressed.

> The student who is asked to speak or write is always likely to do a better job if he is clear about all four of these factors. This in turn may call for a greater degree of explicitness about them than some teachers are accustomed to (p. 186).

At this point it is useful to return to Halliday's concept of meaning potential because it has import for the understanding of the child's possession of a set of restricted language varieties, where the internal form of language reflects directly the function that it is being asked to serve. Halliday (1973a) states that what a child does with language tends to determine its structure. The relatively close match between structure and function can be brought out by a functional analysis of the system in terms of its meaning potential.

> The social functions which language is serving in the life of the child determine both the options which he creates for himself and their relations in structure. We see this clearly in the language of young children, once we begin to think of language development as the development of the social functions of language and of a meaning potential associated with them (p. 34).

The following quotation from Davies (1969) sums up how sociolinguistics can make a valuable contribution to the education of children.

> Common sense tells us of the existence in our language behaviour of register. My argument has been that our study (and our teaching) should be of register not registers, and that the most fruitful way of doing this is to concentrate on points of difference, places where we switch registers, and ask ourselves why switching happens here. Our job as English teachers, I suggest, is not to teach our pupils how to behave but to make them aware of the range of human behaviour in so far as this is mediated through

> language and to do this it is not catalogues we need but critical points, the careful selection (and delineation) of areas where switching is likely (p. 76).

THE RESEARCH

This major section will examine the research undertaken in the field of sociolinguistics, and variously called linguistic ecology, and ethnomethodological linguistics. Pertinent studies of the oral language of children and adults are included where there is some attention paid to register or style differentiation.

An early study of the content and form of children's language was undertaken by Hahn (1948) using first grade children. Although not a sociolinguistic study, spontaneous speech was recorded and analyzed from volunteer talkers during show and tell time, and later while describing small toys and objects and telling a story about a picture. Hahn concluded that longer responses and greater speech practice can be frequently obtained by the manipulation of the immediate speaking situation.

Other conclusions reached involved the length of children's total responses and sentences, and completeness of sentence structure. Hahn noted that these factors depend quite extensively on the immediate situation in which the child speaks, and the topic.

> It follows, then, that the classroom teacher can do much for the continuous development of the child's language by carefully manipulating the situation in which the response is to occur (p. 365).

Gump, Schoggen and Redl (1963) set out to study the behaviour of the same child in different milieus. Detailed records of what one boy did and said were compiled over a typical day at camp and a typical day at home. Another study which showed sociolinguistic promise was that of Dyck (1963) who analyzed the social contacts of children with their parents and teachers. From sociological analysis he identified the Social Contact, a unit which contains one subject, one agent, one raison d'être, and one continuous topic. These components reappear in the context of situation, sometimes with different labels, and as described by Firth, Hymes, Fishman, Gumperz, etc.

Some of the most promising research into situational language use and speech styles has been done with bilingual speakers, and so has focused on diglossia rather than idiolect. Nevertheless, the same variables were used as would be in specific register studies. Ma and Herasimchuk (1972) studied the speech styles of Puerto Rican bilingual speakers. Interviews were designed to elicit speech samples for each language (Puerto Rican Spanish and English) in terms of a style continuum with five discrete points from formal speech to free and casual conversation. Six well-defined clusters of variants (factors) emerged which were speech styles in the Puerto Rican community. Then, by inter-correlating the speakers based on their linguistic behaviour, four behaviourally different groups known as Q-groups emerged, with each group correlating with distinctive demographic and global linguistic characteristics. Q-group analysis, a statistical method, yields groups of speakers which, on the one hand, are maximally alike in their linguistic variation and, on the other hand, are maximally different in their linguistic behaviour from other groups of speakers.

Along very similar lines are two studies by Greenfield and Fishman (1971) which focussed on situational measures of normative language views of such variables as person, place, and topic among Puerto Rican bilinguals. In the first study, five domains were generalized: family, friendship, religion, education, and employment. Then, in order to collect self-report data on normative language use, a situation was selected which seemed typical of each domain, each with a congruent situational interlocuter, place, and topic.

The second experiment featured a design which enabled the study of the independent effect of each of the three situational components of person, place, and topic. This experiment found that of the three components only person was independently and significantly related to reported language preferences. A problem with both experiments was that they described hypothetical conversations.

Soskin and John (1963) describe a pilot study undertaken to develop techniques for gathering macro-samples of spontaneous talking behaviour in uncontrolled settings and to explore methods of analysis of such samples. In their experiment, using as subjects two young husband-wife pairs on vacation, miniature radio transmitters were worn. The experimenters noted that much of the essential information in a situation is lost if one has access only to the verbal material; much of this material is incomprehensible without facial expressions and gestures, without knowing the physical environment, or who some of the nonsubject participants are.

A similar means of collecting language was used by Horner (1968), who used as subjects two three-year-old Negro children from poor, lower-class backgrounds in a ghetto area of New York State. Two days of audible events were collected. Like Soskin and John, she criticized her study thus:

> As anticipated, the principle shortcoming of the study is the lack of visual information. One cannot see what is happening. Thus, the data are less complex than would be desirable under ideal circumstances and interpretation must rely too greatly on inference (p. 176).

Horner termed the study "ecological" because the verbal samples were gathered in the natural settings in which they occurred, without the intrusive presence of observers and any restrictions on the movements of the subjects.

The child's network of verbal interaction was determined along with the frequency of interaction with various groups and individuals in the environment. Using a Skinnerian operant framework of mands, tacts, echoic and intraverbal responses, an analysis of the functions of verbal behaviour for the child and the interlocuters was carried out.

Horner and Gussow (1972) present a diagram which shows an interesting way to describe verbal interaction of a particular subject. The diagram, of John at home, is based on the Horner study of 1968. (See Figure 7.)

Of studies carried out in school settings, there are very few. De Stefano (1972) asked the question of how much of the Language Instruction Register have Black children who live in the ghetto and speak the vernacular acquired by grade one, three, and five. The Language Instruction Register (LIR) is the one connected with middle-class culture and literacy learning. The study demonstrated that

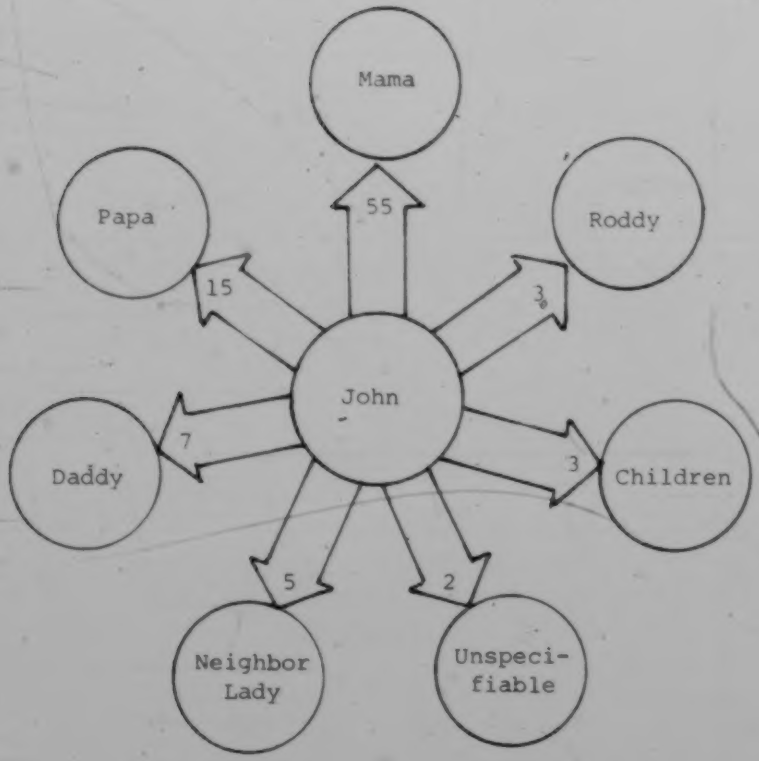

Mama
55
Papa
15
Roddy
3
John
Daddy
7
Children
3
5
2
Neighbor Lady
Unspeci-fiable

Figure 7

NETWORK OF VERBAL INTERACTION AND FREQUENCY OF VERBAL EVENTS, WITH JOHN AS SPEAKER, 90 MINUTES, WEEKDAY MORNING

(Horner and Gussow, 1972, p. 172)

given the social circumstances appropriate to the LIR, Black children who speak the vernacular productively control a large number of forms which are part of that register. These children could respond linguistically to different social settings in their lives, and their range of registers seemed to be increasing.

Rainey et al. (1969) set out to discover and describe style switching of the teacher's speech in a Head Start class of 20 children about five years of age. Speech was examined for contrasting pairs, and pairs of allomorphs were identified, with formal and informal labels assigned. It was found that the teacher adopted speech with a larger number of informal features when she wanted to draw closer to the pupils. Her speech contained a greater frequency of formal features when she was maintaining a greater distance.

Two studies concerning the oral language of adults will be reviewed at this point of the discussion. Horowitz and Newman (1964) set out to test the differences between spoken and written expressions. The data from two experiments were analyzed in two major ways. First, a psychological analysis was made to catalog the ideas and to determine differences in other aspects of content between the two modes. Second, type-token ratio analyses were made.

It was found that spoken expression produced significantly more ideas and subordinate ideas. There was far greater repetition of words in oral expression as well as greater repetition of phrases and large parts of sentences. "It was common in the spoken samples for the subject to state an idea and then to restate it nearly verbatim, partially for emphasis and partially for elaboration" (p. 646).

The psychological factors included inhibition, deliberateness, memory for what was said, and a drive to prevent silent intervals.

Chiu (1973b, 1973c) reported on a large TESL study being carried out by the Staff Development Branch of the Public Service Commission of Canada, which analyzed the linguistic characteristics of written and spoken English that federal government employees used at work. Lexical verb analyses were conducted as well as syntactic analyses and a study of fixed expressions. Although the findings are really not applicable to either register or child language study, the various methods of analysis showed promise for such studies, particularly the analyses of lexical verbs using the type-token ratio, and that of fixed expressions such as "I think," "well," "right," "kind of," "you see," etc.

The only real research undertaken in register per se is that of Ure (1969, 1971). In the 1969 article she discusses the usefulness of the language-in-action register, which is needed by non-native language learners who are exposed to, and required to use, language for everyday practical purposes, and for research scientists and students needing to acquire technical know-how. Conversational texts were collected for classroom use to illustrate appropriate language and to serve as models, and as a pilot research project on which to base a deeper knowledge of register in general.

Games were chosen as an appropriate situation because they provide a relaxed atmosphere and are replicable. As a contrast to the language-in-action, a second section was included where language was less immediately connected with action, for example, describing a bottle opener with hands behind back, or screened from view. The investigator counted the number of "ands," and the different frequencies with which it occurred in different situations. This separated two registers from the corpus: consultation had only 2% in both spoken and written media, while spoken narrative had 6 1/2%.

Consideration of the "ands" with the "buts" and "ors" that serve to link clauses gave a fuller set of distinctions. In terms of percentage frequency to total number of words, these registers were isolated: written narrative 2 1/2%, written consultation 3%, spoken action 3 1/2%, spoken consultation 4%, spoken narrative 6 1/2%. The counting of adjectives showed that written texts when matched against spoken ones had more adjectives.

In Ure's 1971 article she discusses lexical density and register differentiation in sets of texts chosen on the principle of situational contrast, and for their usefulness in illustrating a wide range of the kinds of registers likely to be needed by the two groups of people previously mentioned. Much of the findings of this analysis have been described in section 8(b).

The situational classification by social function is as follows:

A. Language in action
  (1) Immediate - doing
  (2) Consulting
  (3) Non-Immediate - Describing
  (4) Directions
  (5) Discussion

B. Narrative
  (1) Entertainment.
  (2) Information
  (3) Exposition

(from Table 3, p. 451)

These represent lexical densities from lowest (A1) to highest (B3). There was a clear correlation between lexical density and languages-in-action. Situational types are characterized by typical lexical densities.

Ure sees the findings of register variation as being applicable to language teaching in two ways. First, using a situational approach, we may devise the best methods of teaching students a command of language for specific social purposes, for example, consultation, exposition, etc. Second, along the lines of problems of presentation of language itself, ". . . we may look to find in the results of our research ideas on the best method of presentation of the various features of lexis and grammar that we need, as teachers, to put across" (p. 452).

Ure found that though there was a fair number of sentences with no lexis at all—they could be described purely in terms of grammar—it is still possible that such sentences provide the key to one of the main features of the patterning of English language-in-action.

In the final part of her 1971 article, Ure makes an important statement for those undertaking register research.

> The fact that a regularity of patterning is more clearly to be perceived when the language of all participants is taken together is one argument for treating register as a feature of language events as a whole, rather than as a feature of individual speakers (p. 452).

Jensen (1973) compared selected features of the casual and careful oral language styles of superior and average fifth grade boys and girls. Fluency was considered as quantity of language, lexical diversity, lexical uniqueness, and freedom from mazes. Grammatical control was defined in terms of structural complexity (C-unit length, clause length, ratio of clauses to C-units), the occurrence and frequency of basic structural patterns, and mastery of the conventional English usage of the region. The language function categories included expressing tentativeness, asking questions, issuing commands, expressing disagreement, and relating personal experiences.

Language style proved to be a differentiating factor among sample subgroups more often than did either ability or sex. It was concluded that increasing the formality of the language setting failed to increase the effectiveness of language expression. Jensen found that the barrier to communication imposed by large numbers of mazes was especially apparent within the careful style.

SUMMARY

The emphasis in this chapter has been on the theoretical and conceptual underpinnings of sociolinguistics, in general, and of register and speech styles, in particular. It was considered necessary by the writer to synthesize the extensive literature on the subject and to present this in such a manner that the rationale for the present study is clearly presented.

The second part of the chapter has focused on the more salient studies which are of interest in the present research construct and methodology.

Chapter 3

DESIGN OF THE STUDY

INTRODUCTION

Chapter 3 is concerned solely with the design and piloting of the study, while procedures for transcription and analysis form the subject matter for Chapter 4. In this chapter a beginning is made with the selection of the subjects. Since sampling procedures were not applicable to this study, further selection criteria are delineated in the task descriptions.

A discussion of the development of the tasks follows, and this includes some theoretical framework explanation. This leads into the actual task descriptions and their administration. Each task description includes information on subject selection and criteria, preparation required by and for the task, the actual task wording as presented, the situational aspect, and the methodology for data collection. Since the technical aspects were quite complicated a subsection then follows on technical equipment.

A final subsection describes the administration of the full pilot study and the subsequent changes that were made for the main study. Two appendices supplement the information contained in this chapter, and are included as appendices for chapter brevity.

SELECTION OF THE SUBJECTS

The children used in the study did not comprise a sample drawn from a population of children; rather they were selected according to criteria developed by the investigator. Four key subjects provided the data for the study, though other subjects were used as well and the data provided by them played an important role in the various systems of analysis. For the purposes of the study it was essential to follow the language usage of key subjects through the four task situations. The focus on several subjects throughout suggests in part a case study approach.

The study was conducted in a large suburban community adjacent to a western Canadian city. The Supervisor of Language Arts and Reading and the Assistant Superintendent of Curriculum and Instruction selected an elementary school considered representative of middle socioeconomic status. The investigator then met with the principal of the school and the three sixth grade teachers, all of whom agreed to cooperate. As the three classes were homogeneous, one was randomly chosen to provide the key subjects, and a second randomly chosen to provide the subsidiary subjects in Task 3.

A pilot study was conducted two months prior to the main study, and similar selection procedures were followed. The school was similar in size and socioeconomic environment to that used in the main study. The only difference was that the principal invited two particular sixth grade teachers to participate, which they gladly did. All other procedures were the same as for the main study. The pilot study was a full-scale rehearsal for the main study.

The teacher of the sixth grade class used to provide the key subjects was asked to identify dyads of the same sex. The criteria used are those detailed for Task 1. This provided a core of subjects to be used throughout the study, comprising two girls and two boys from the same class. The investigator, when advising the teacher of the selection criteria, asked that individuals be linguistically competent and comfortable in oral language situations. The investigator also asked that, in the teacher's opinion, the individual subjects be average to above-average students.

No other specific criteria were used, such as IQ range, range of scores on standardized or achievement tests, or sociometric surveys. The investigator considered that, this being an initial study, a range of variables among the subjects was an important feature which should not be restricted or controlled at this stage. However, it was essential to have dyads who were very close friends, who knew each other very well, and who were comfortable and able users of oral language.

The final selection of the two dyads was made by the investigator in an interview where, through discussion with each pair, he was able to gauge degree of intimacy and willingness to cooperate. The interview was of an informal nature which focused on shared backgrounds and experiences of the two individuals of each dyad.

The teacher was then asked to select subjects for the Task 2 situation, the criteria for which are detailed in Task 2. At this point the investigator conducted a sociometric survey among all the children in the class. The results of the sociometric survey validated with no discrepancy whatsoever the teacher choices of subjects, in paired situations, for both Tasks 1 and 2. This perfect correlation between teacher perceptions of social bonds and the children's own social preferences was found in both the pilot and main study classes.

At this point the investigator drew up a schedule for data collection and sent this, along with an explanatory letter, to the parents of the key subjects and the main subsidiary subjects, that is, those four subjects who entered at Task 2. All parents gave their support, and the subjects showed enthusiasm for the project. (Appendix A: Letter to Parents.)

Four tasks were designed around the first four of the five speech styles identified by Joos (1960, 1967). The four tasks were designed to each create a context of situation and to elicit situational language of either an intimate, casual, consultative, or formal nature, to use the terms Joos chose for the four speech styles. The final speech style, frozen, was abandoned because it is the style of written language.

7

Each task description to follow describes the subjects, selection criteria for the subjects, the task wording as directions to the subjects, preparation required for the task by both subjects and investigator, the situational aspect of the language task, and the methodology for data collection.

The tasks incorporate four scales of language determinancy, and the fourth one can be considered as the social distance between the addresser and addressee. The addressee in most circumstances, except for intimate style, should be considered in the plural.

Diagrammatically the four scales can be shown thus:

SPEECH STYLE

intimate casual consultative formal

GROUP SIZE

dyadic large

ADDRESSEE/ADDRESSOR RELATIONSHIP

intimate formal

ADDRESSEE/ADDRESSOR DISTANTIATION

tête-à-tête distant

The correspondence between the various scales does not always hold true, and the design of the tasks reflects this. An intimate addressee/addressor relationship can hold within a large group, but one would not necessarily expect as a matter of course that an intimate speech style would be employed. The design of Task 4 will demonstrate this. Likewise, dyads might converse in a formal style, as would likely occur in a student-teacher interchange over a matter of discipline.

THE TASKS AND THEIR ADMINISTRATION

The investigator spent several days in the classroom acting as a teacher aide, helping individual pupils and groups of students, even teaching several social studies lessons. In this way he familiarized himself with the children and likewise allowed them to become accustomed to his presence. The investigator introduced himself to the class as being from the university and as having an interest in how children in grade six talk among themselves. He also outlined that he would be videotaping some children while they talked, and most children in the class at the end.

During the description of each task to the children the investigator attempted to create as relaxed and calm an atmosphere as possible. This was reasonably assured because of the familiarity between investigator and children after several days together in the classroom. The investigator stressed that each task was informal in the sense that he was not particularly interested in the factual content of the tasks, the "correctness" of language used, or even the specific topics the subjects might consciously or subconsciously settle on.

A general and broad subject matter theme was chosen for all tasks. This was sports, games, hobbies or special interests. This range of subject matter was considered broad enough to appeal to all of the children in the study. After completion of the pilot study the investigator talked informally with the key and main subsidiary subjects who all stated that the subject matter of the tasks, as worded, was quite appealing and not restrictive in its range.

TASK 1: INTIMATE SITUATION

Subjects: two groups, dyads.

(1) G_1 G_2

(2) B_1 B_2

Selection Criteria:

Children who know each other very well. They may live in close proximity to each other, play outside of school hours, be very close friends in the playground. They might sit close to each other in class, work together on class projects, etc. They most likely will have been in earlier grades together. The classroom teacher was asked to identify such pairs, who are also linguistically competent and fluent speakers. The investigator selected the two pairs after talking with each pair to gauge degree of intimacy, willingness to talk and willingness to cooperate.

Preparation for Task:

None. The task was presented orally by the investigator at the time of data collection. Spontaneity was a requisite of the task.

Task:

The two key subjects forming the dyad left the room with the investigator. After some informal and friendly talk on the way to the room set aside for the investigator, the subjects were seated at a round table, and the task described.

______ and ______, you know each other really well, and there must be lots of things you've done together that you really enjoyed and that were really exciting. Maybe you're thinking of some right now. Why don't you have a chat about something you both did together, or maybe something you're planning to do together. It might be about sports, games, hobbies or a special interest you both have.

(The investigator began audio and video recording as soon as the task was presented.)

Situational Aspect:

Dyadic, in a room other than the classroom. The pair is seated together at a round table.

Methodology for Data Collection:

(1) Audiotape recording using one microphone on table, and a cassette recorder.

(2) Videotape recording using one microphone on table. The video camera is located at a distance from subjects so that the presence of the camera is minimized. The telephoto lens feature compensates for remote placement.

TASK 2: CASUAL SITUATION

Subjects: two groups of four subjects each.

(1) G_1 G_2 and B_3 G_3 who are friends of either G_1, G_2, or both.

(2) B_1 B_2 and B_4 G_4 who are friends of either B_1, B_2, or both.

Selection Criteria:

The teacher was asked to identify friends of B_1, B_2 and of G_1, G_2. The friends may play together in the playground, work together in class projects, and play sports and games together in school or neighbourhood activities. The friends must also be on friendly terms with each other.

(A sociometric survey was carried out to validate the choices made, and in both groups teacher choices were totally validated.)

Preparation for Task:

None. The task was presented orally by the investigator at the time of data collection. Spontaneity of oral language was important.

Task:

The two key subjects plus the two subsidiary subjects left the classroom with the investigator. After informal and friendly talk on the way to the other room, the subjects were seated at a round table. (See Appendix B for seating and technical arrangements.)

The task was then presented.

______, ______, ______ and ______, you all know each other quite well, and I guess that there are things that you all like doing together at times, such as sports, or games, or maybe hobbies or some special interest. Maybe you'd like to have a chat about a sport, or game, or hobby or some special interest that was really exciting. Or maybe you'd like to talk about something you're planning to do or play soon. (The investigator began audio and video recording as soon as the talk was presented.)

Situational Aspect:

Group of four, in a room other than the classroom. The group is seated at a round table.

Methodology for Data Collection:

(1) Audio recording using two microphones on table, and a cassette recorder.

(2) Video recording using two microphones on table. The video camera is located as far as possible from the group, using the telephoto lens to compensate for remote placement.

TASK 3: CONSULTATIVE SITUATION

Subjects: two groups with six subjects per group.

(1) G_1, G_2, B_3, G_3 and B_5, G_5 who are children of the same general age but from another Grade 6 class within the school.

(2) B_1, B_2, B_4, G_4 and B_6, G_6 who are children of the same general age but from another Grade 6 within the school.

Selection Criteria:

The consultative situation is the norm for coming to terms with strangers so children were included from outside of the classroom. The outside children are known to a degree by other members of the group, as they are of the same grade level and general age level in the same school. The classroom teacher was asked to select the two mixed-sex pairs on the basis of the individuals being linguistically competent and comfortable speakers, and average to above-average students. The individuals in each pair had also to be on friendly terms with each other.

Preparation for Task:

On the day before the group convened, the investigator informed each group member that he/she would be getting together to plan a sports event for his/her grade, and that some children from another grade six class had also been invited along to share their ideas. Group members were assured that no preparation was necessary, and that it would be their ideas at the time that would be important.

Task:

The four subjects as used in Task 2 left the room with the investigator and were introduced to the two subjects from the other grade six classroom. After informal and friendly words on the way to the investigator's room the six children were seated and the task given.

I'm sure that you ______, and ______, and _____, and ______, and ______, and _____ know that this summer the Commonwealth Games are coming to Edmonton, Probably some of your parents have tickets for some of the events. Let's say that all grade sixes in ______ ______ School are going to have a Commonwealth Games afternoon. You are the group to set it up. You'll probably want to talk about how you would plan it, what events you would have, and who you would need to help you. (The investigator began audio and video recording as soon as the task was presented.)

Situational Aspect:

Group of six, in a room other than their regular classrooms. The group is seated at a trapezoid table so that all members can see each other yet be at an angle appropriate for good quality video recording. (See Appendix B.)

Methodology for Data Collection:

(1) Audio recording using three microphones placed on the table, and a cassette recorder.

(2) Video recording using three microphones placed on the table. The video camera is placed as far from the group as possible using the telephoto lens to compensate for remote placement.

TASK 4: FORMAL SITUATION

Subjects: four individual key subjects to present to a group of twelve peers.

(1) G_1
(2) G_2
(3) B_1
(4) B_2

Selection Criteria:

The same key subjects as were used for the intimate situation (dyads) and which have been featured in all tasks. The teacher was asked to select nine pupils from the class which, when added to the three key subjects not presenting, would constitute the audience. The ratio of boys to girls is 4:5.

Preparation for Task:

The task was assigned one week before the presentation date. Adequate in-school preparation time was given, in consultation with the classroom teacher. The four key subjects met with the investigator the day after the assigning of the task to discuss their self-selected topics. Each subject was thus aware of what others were presenting so that overlap and repetition could be avoided.

Each subject was asked not to prepare a full written text of his/her presentation, though brief notes could be made which could then be consulted during the presentation. The investigator asked to see these notes before the presentation day, at which time he determined whether or not the notes constituted a text which could be read. If such was the case the investigator and subject jointly reduced the notes to point form.

The subjects were advised to present at a fairly slow rate so that the audience could ask questions during the presentations should members wish. The subjects were asked to invite questions at the end of their presentations.

The investigator also informed the class of the presentations several days in advance.

Task:

The investigator will inform the presentors of the task.

In the small groups you've been in ______, you've been talking about ______ (sports, games, activities, special interests). It's been very interesting listening to you all talk; you seem to know a fair bit about ______ (specific sport, game, activity and/or special interest). It would be really good if you could share some of your information with the class. I'm sure they would be very interested. Maybe you could prepare some topic about sports, games, hobbies or some special interest, something that you are really interested in and you think the class would be too.

You can have pictures to show, use the overhead projector, and use filmstrips with your talk if you like. Think about what you'd like to talk about, and we'll meet again tomorrow and you can tell me what you have in mind.

Miss ______ (classroom teacher) said that she will give you some class time to prepare for your talk, and I can get books, pictures and filmstrips from the university library for you to use.

The investigator will inform the class of the presentation.

On ______ (day), ______ (name) will be giving a talk to a lot of you on an interesting topic about sports, games, hobbies or a special interest. He'd/She'd like you to ask some questions while he's/she's giving his/her talk, or straight afterwards, so don't feel shy about asking or saying something, will you? (No response intended.)

Situational Aspect:

Single speaker standing at a desk, in front of a chalkboard, presenting to a group of twelve seated about ten feet away in two equal rows.

Classroom, other than the subjects' classroom, is the site used.

Methodology for Data Collection:

(1) Audio recording of the presentor, using a clip microphone worn by the subject, and using a cassette recorder

operating out of a sound mixer.

(2) Audio recording of audience members using two microphones on floor stands, and a cassette recorder operating out of a sound mixer.

(3) Video recording with mixed sound and employing a camera behind the audience focused on the presentor.

(4) Video recording with mixed sound and employing a camera in front of and to the side of the audience, capable of zooming in on any one subject.

TECHNICAL EQUIPMENT

Technical aspects of the recording situation for each task appear in Appendix B. All microphone inputs were channelled through a sound mixer to a cassette recorder and into a videotape recorder (VTR). In Task 4 two VTRs were used, and an audio line was run from one VTR to the other.

The cameras used were Sony CVI-2100As on tripods, each with a zoom lens feature. The VTRs were Sony AV-3600s, and the cassette recorder was a Sony TC-110B. High quality, low noise Sony C60 cassette audiotapes were used; all were brand new tapes. Memorex videotapes were used, and these were also brand new.

The microphones employed were two Sony F-540s and one Sony ECM-150. When used on tables they were held in cushioned Shure table stands; when used in Task 4 the two Sony F-540s were held in floor stands, and the ECM-150 was worn by the presentor.

Before each recording session all heads on the audio and video recorders were cleaned and all equipment was tested out. A portable television monitor was used to test out both recording and playback of the VTRs and the videotapes.

THE PILOT STUDY

Some two months before the main study, a pilot study was conducted, the main purposes of which were to determine the efficacy of the tasks, including the subject matter, and to test out the effectiveness of the recording arrangements and equipment. Since the situation is different for each of the tasks it was considered necessary to conduct the pilot study as if it were the main study, and so all four tasks were tested with two groups based on the two initial dyads.

The pilot study was carried out in an elementary school which in all aspects was almost identical to the school in which the main study was to be conducted. There were six important outcomes of the pilot study. The first was the abandonment of the live coding scheme originally proposed. The investigator had planned to live code all nonlinguistic features by having the coders speak into hand-held microphones attached to cassette recorders. Experimentation of this procedure demonstrated that it was impossible to code all the features of one subject, and that good quality videotaping was a superior method of capturing nonlinguistic features.

It was also necessary to experiment with different seating arrangements in each task situation. Children had to be able to look at each other, be close to each other, yet also be in full view for video recording. The seating arrangements described in the tasks and pictured in Appendix B, proved to be the optimum conditions.

There were many technical aspects which were refined during the pilot study. The distance of recording equipment from the microphones was crucial. VTR units must be placed as far as possible from microphones so that the noise generated by the recording equipment is not picked up by the microphones. Ideally all such equipment should be hidden from view behind a screen, and there should be a technician on hand to monitor equipment operation and sound recording levels. It is also essential to clean the recording heads of VTR units regularly. Testing all pieces of equipment thoroughly before each recording session can prevent the loss of excellent data through equipment malfunctioning which is not evident until videotapes are replayed.

It was found that the optimum length of time for the first three tasks was fifteen to seventeen minutes each. After about seventeen minutes it became evident that the subjects were tiring of the situation, and the subject matter of their discourse became repetitive and stale. Consequently, for the main study the decision was made to allow the first three tasks to each run for fifteen to seventeen minutes. In Task 4 there was no reason to control time, and each subject tended to speak and answer questions for up to ten minutes. At times, it was thought necessary by the investigator to ask one or two questions of the presentor so as to elicit more language from him or her. This was only done once in the main study.

From the pilot study the investigator developed a suitable procedure for transcribing the audiotapes of oral language and for coding nonlinguistic features from the videotapes. These procedures are described fully in Chapter 4. The investigator also developed a key for transcribing the audiotapes. This key was developed from the stress, pitch, intonation and pause cues provided by the subjects, and proved to be more useful in this study than the "phonological unit" method of segmentation used by Loban (1976, p. 104). The transcription key method of segmentation is detailed in Chapter 4.

Chapter 4

TREATMENT AND ANALYSIS OF THE DATA

INTRODUCTION

This chapter gives the detailed information of how the data were treated after having been collected on both audio and videotapes. The process of transcribing the tapes and organizing both the linguistic and nonlinguistic features of the contexts of situation is described, and then the lengthy processes of analysis are described in the order in which they were carried out. In order to place the whole system of analysis in perspective the chapter begins with a situational categorization of all the sociolinguistic variables which make up the task situations. It can then be readily understood which variables have been partially controlled in the study, and which variables are focused upon in analysis.

THE ANALYSES IN PERSPECTIVE

For each task the same four key subjects are involved, though in three of the tasks additional subjects were introduced to the language situation in accordance with the four language usage scales described. The detailed analysis of the oral language of the same key subjects across all four task situations allows a controlled comparison of situational language use according to the context of situation.

It is necessary to take into account the situational aspects of each task in order to account for possible differences in language usage. The investigator therefore considered it essential to employ several different types of analysis so as to account for all major aspects of the context of situation. Formal analysis will focus on, but cannot be restricted to, the language samples of the four key subjects in each task situation.

SITUATIONAL CATEGORIZATION

A global overview of the task situations from a sociolinguistic perspective will yield information about the context of situation pertaining to each of the tasks. Within this overview all of the detailed and systematic parts of the discourse analyses can be recognized. A discussion of the components of the situational categorization of the language tasks sets the individual analyses in perspective. The method to be used is a synthesis and refining of those schemes of stylistic identification as described by Enkvist et al. (1964, pp. 86-89), Halliday (1974, pp. 34-36, 48-53), Halliday et al. (1972, pp. 153-155), Doughty et al. (1972, Chapter 11), and Ellis (1966, pp. 79-95).

Field of Discourse:

1. Subject matter of the text, and the content of what is said. (Subject Matter Analysis)
2. The institutional setting in which the language text occurs.
3. The whole activity of the speaker(s) and/or participant(s) in the setting; what they/he/she are/is engaged in doing.

The nonlinguistic features of communication. (Nonlinguistic Features Analysis)

4. Distinguishing vocabulary items.

   The field of discourse largely determines the choice of vocabulary. (Lexical Diversity Analysis: Type-Token Ratio; Contractions, Compactions and Truncations; Colloquial and Standard Forms of "Yes")

Mode of Discourse:

1. Channel of communication adopted: spoken, written, graphic, etc.
2. Function language is being used for: persuade, soothe, sell, control, explain, inform, teach, argue, etc.
3. Degree of spontaneity or nonspontaneity/preparedness.
4. Lexical density.

   Mode of discourse largely determines the density of the lexical content. (Lexical Density Analysis)
5. Grammatical features and patterns.

   (C-unit Analysis; Elaboration of C-unit Analysis; Lexical Verb Analysis. Also Extraneous Linguistic Material, to be treated separately.)

Style/Tenor of Discourse:

1. Degree of formality (Joos): intimate, casual, consultative, formal, (frozen).

   This dimension must be seen as a continuum, with no points between the two poles of extreme formality and extreme informality capable of being defined with any precision.

2. Role-relationships between participants:
   a. permanence of the relationship.
   b. degree of emotional charge.

   Broad role-relationships can be defined by pupil/pupil, child/child in peer group, casual acquaintances, etc.

3. Nature of feedback:
   a. linguistic dominance. (Linguistic Dominance Analysis)
   b. nonlinguistic features of communication. (Nonlinguistic Features Analysis: Functional and Nonfunctional).

All components of the context of situation are accounted for in both the design of the study and in the analysis of the linguistic and nonlinguistic features of communication. A discussion of each component in the situational categorization will clarify how each is treated in the study.

Field of Discourse:

1. The subject matter, broad though it is, remains the same across the tasks. In some sense the subject matter is a predetermined variable, with the directions (sports, games, hobbies and special interests) broad enough so that the subject matter would fit comfortably into each task situation.

   The Subject Matter Analysis looks in detail at subject matter switching and maintenance across tasks.

2. The institutional setting is in all cases the school which

all subjects attended. Thus this variable remains constant. No formal analysis is required.

3. The activity(ies) of the speaker(s) and participant(s) in each task situation was recorded and synchronized with the spoken language. In the transcripts it appears as nonlinguistic features. The Nonlinguistic Features Analysis deals with both functional and nonfunctional aspects of these features.
4. The type of vocabulary expected to be used by the key subjects is constrained to some extent by the subject matter, which is standardized across tasks. Vocabulary items, both in range and type, should be different across tasks, and the Lexical Diversity Analysis measured by the Type-Token Ratio is an accepted measure of vocabulary breadth. Type of vocabulary used is examined in a restricted manner by the analysis of Contractions, Compactions and Truncations. The degree of subject switching would make deeper analysis of type of vocabulary too open to competing variables.

Mode of Discourse:

1. The channel of communication is a controlled variable, and is spoken.
2. The function that language is being used for changes even within tasks, and a subanalysis might look at language functions in relation to subject switching and maintenance. In the first three task situations language functions to

recall, reconstruct and share experiences, to plan and to some extent persuade. In the fourth task situation the dominant function is to explain, inform and teach. Experiential bases is one method of looking at language functions.

3. The degree of spontaneity was controlled to a large extent by the investigator as necessary for the functioning of each task. The directions given subjects for each task situation describe the degree of spontaneity/preparedness, and further analysis is not called for.
4. Lexical density is measured by the Lexical Density Analysis scheme. The lexical density for each key subject can be compared across tasks.
5. The grammatical features and patterns are analyzed via several different methods for each key subject across tasks. The C-unit Analysis is the basic measure, followed by the Elaboration of C-unit Analysis. Lexical Verb Analysis considers the use of verbs through application of the type-token ratio, and auxiliary verb forms are also analyzed.

Style/Tenor of Discourse:

1. The degree of formality is a controlled variable, and is the variable through which the task situations are designed and presented. In methodological terms it is the dependent variable whilst all of the methods of analysis to be applied are independent variables.

2. Broad role-relationships can be defined as peer/peer. Although the permanence of the relationships remains constant for the key subjects across tasks, different subjects added to each task situation change the role-relationship of the whole group. The role-relationships were largely controlled by the investigator through the criteria for subjects in each task situation.
3. The nature of feedback is analyzed in two ways. Linguistic dominance as measured in the Linguistic Dominance Analysis gives an account of the degree of linguistic presence of each key subject. Nonlinguistic features of communication, as measured by the Nonlinguistic Features Analysis, describes how nonverbal communication operates between participants in a sociolinguistic setting.

The reporting and description of the data will be undertaken in the same order as the analyses are described in this situational categorization. In some circumstances much more understanding can be gained by looking at several analyses side-by-side, and using one to complement and add power to another. Where this adds to the findings it will be employed in Chapter 5. The next major section of this chapter describes the treatment and methods of analysis of the data.

TRANSCRIBING THE DATA

LINGUISTIC FEATURES

All linguistic material was recorded on both the audio and videotapes. Where the sound quality of the videotape was superior to that of the equivalent audiotape, a dub was made. This only occurred once. The quality of the mixed sound was, in all other cases, very acceptable.

The first step in transcribing was for the investigator to listen carefully to the Task 1 tape for one group in order to familiarize himself with the tonal and inflectional qualities of the two key subjects. This, it was found, facilitated the segregation of voices in the second and third task situations. Once the investigator could clearly distinguish each of the two voices, written transcription began. A Sanyo Memoscriber, Model TRC 8000 was used, along with headphones and the foot control. It was found that turning the speed control towards minimum made word discrimination easier.

A hand-written transcript was made and checked until all sounds on the tape were accounted for, and each utterance ascribed to a subject. At this point the transcripts were typed on the right half of the page to later allow for the recording of nonlinguistic features. With the typed transcript the investigator then used the videotape to check against the transcript, replaying it as many times as was necessary to fill in all gaps and identify each speaker's utterance with certainty.

At times a word, several words, a phrase or sentence was unintelligible, regardless of efforts to comprehend what had been sounded. Another person was then asked to listen to the audiotape, one who was experienced with the transcribing of children's oral language. Where he also found the utterance to be unintelligible, it was so marked in the transcript. Episodes of laughter, both individual and mass laughter, were noted, along with the person or persons who laughed. On the occasions where all children in the group laughed, the description "general laughter" is found, except in the first task situation where "both laugh" appears. There were occasions when sound other than laughter was made, and in such cases the sound was described, as was laughter, in parentheses and with the user identified.

e.g. (from Group 1, Task 1, p. 15):

M (mimics the sounds the boys made)

Where there was a long pause between utterances, such as occurred when a topic had been exhausted and a new one yet to be found, the word(s) "pause" or "long pause" appear(s) in parentheses. On several occasions several subjects spoke together, or there were two conversations occurring at the same time. The description "mixed interjections" is used for such instances. All other descriptions which appear in parentheses are self-explanatory.

The pilot study enabled the investigator to determine the best method of transcribing the audiotapes, and of coding the non-linguistic features, and the method described above proved to be most efficacious. From the pilot study the investigator also was able to develop and refine a system for transcribing the recorded oral language of the subjects, and this was used in the main study. The transcription key appears below.

Transcription Key

..	denotes a short pause in the speaker's discourse.
...	denotes a long pause in the speaker's discourse, though the speaker still carries on with the theme and/or sentence pattern which preceded the pause. The pause gives the speaker time to think what comes next in the course of events being described.
. (period)	denotes the end of a speaker's statement, theme, or response. Intonation generally signifies the termination of the statement, theme, or response.
Capital letters to begin a statement	indicates that the speaker is beginning a new statement, theme, or response which is quite different from that which immediately preceded it by the same speaker. Capital letters usually are used when a speaker begins an utterance immediately following another speaker. Where the speaker is continuing his/her discourse after having been interrupted by another speaker, a capital letter is not used in the continuing discourse, except for proper nouns, or to denote quoted speech.
- (dash)	denotes where the speaker changes the theme, adds information which breaks the thought and sentence pattern, or abandons the theme to begin an entirely different one. Sometimes the speaker will also abandon the sentence pattern begun, and will restate the theme in an entirely different manner. (See the edit maze/false start in the Extraneous Linguistic Material Analysis.)
"______"	denotes that the speaker uses actual words spoken by a person or persons described, or who are taking part in the course of events being described. That person might be the speaker him/herself.
?	denotes that the intonation pattern of the speaker suggests that a question is being asked.
(?)	denotes that the intonation pattern of the speaker suggests that a rhetorical question is being asked, one which is intended not to be answered. Rather the speaker is maintaining or eliciting the listener's attention and is asking the listener to recall the experience or the situation, which is a shared one.
!	denotes, through the intonation of the speaker, emphasis, affirmation at times, and at other times nonfamiliarity with the course of events introduced. Also denotes

> points where the speaker will correct him/herself, and where he/she shows surprise. Also used to denote when the speaker suddenly remembers the situation or course of events being described.

In order to check the efficacy of the transcription key and the accuracy of transcription of the audiotapes, a sample from each of several tapes and a copy of the transcription key were given to a doctoral student in language arts. This person was also using transcribed audiotape data and so was familiar with the transcribing of children's oral language.

There was a high degree of agreement on the identification of words and sounds, such as make up some of the extraneous linguistic material. The major area of difference, though still relatively high in agreement, was in the length of pauses and in the deciding of where periods should be placed. Since it was not intended to count utterances such as sentences and statements, or length of utterances, this type of disagreement was not considered to present a problem.

CODING THE NONLINGUISTIC FEATURES

After having completed the transcribing of the audiotapes the videotapes were used to code all nonlinguistic features. The left half of the page was used to note all nonlinguistic features. Each feature was matched not only with the speaker, but also to the exact point in the speaker's discourse. Consequently when the final transcripts were typed up the nonlinguistic features matched exactly the speaker's words horizontally on the page. Appendix E contains examples of transcribed data pages.

It was necessary to go through the videotapes many times, and to repeat segments over and over again, especially in the third task situation where six children were interacting. It should be remembered that nonlinguistic features were coded not only for the speaker, but for all subjects in the first three task situations. In Task 4, the formal presentation situation, all nonlinguistic features were coded whether or not the behaviour was noticed by another group member or by the presentor. The investigator tried to be as thorough as possible in coding all nonlinguistic data, however insignificant it might have seemed.

The nonlinguistic features coded included eye contact, hand, head, arm, body, and leg gestures or movements, raised eyebrows, facial expressions, eye movements and fixations, manipulation of objects and materials, and who is being addressed by a particular speaker. This latter feature was coded because it was important for eye contact.

The investigator attempted to be as objective as possible in his coding of the above features, though it is realized that the interpretation of a facial expression involves an individual assessment on the part of the observer. The investigator would make the point that having known the children for one to two weeks, and having viewed the videotapes for many hours, gave him the advantage of being able to quickly recognize and even predict behavioural traits and habits in individual children.

In order to assess the reliability of coding, the investigator had two doctoral students who were experienced with coding from videotapes, code a random selection of the videotaped data. The investigator instructed the two coders by demonstrating to them how and what he had coded on one of the videotapes. The two coders then individually coded a different selection each. They were given as much time as they cared to take, and several days later the investigator checked his coded data with that of each coder. Different words were often used to describe the same features, but on very few occasions was there disagreement over the intent of the subject or the meaning of the nonlinguistic feature.

Just as it was misleading to quantify nonlinguistic features in the study so it was difficult to present discrete agreement and disagreement features in the reliability results. Where the investigator used "expression of distaste" to describe a facial expression another coder used "grimaced" and another "frowned." Upon mutual viewing of the tapes all coders agreed on the intent of the facial expression. All coders agreed that it was of great benefit for the transcriber/coder to be present during actual data collection. The opportunity to interact with and observe the subjects in real life makes for a greater degree of competency and understanding when coding from the videotapes of those subjects.

ANALYZING THE DATA

At this point the data, typed and declared reliably transcribed, were ready for formal analysis. To make the task of analysis easier the investigator colour coded the utterances of key subjects by using light colour felt pens. This rendered the language of the key subjects outstanding in the transcripts.

1. EXTRANEOUS LINGUISTIC MATERIAL

The first step taken in analysis was to isolate and categorize all extraneous linguistic material. This material is what Hunt (1965) called "garbles" or "extraneous matter," and which Strickland (1962) and Loban (1963, 1976) called "mazes." Walker (1973) preferred to call such material "extraneous material, or noise," while Anderson (1972) used the term "maze" and the categories developed by Strickland (1962), defining the maze as "unattached words or word fragments which are not semantically or grammatically a part of the C-unit" (Anderson, 1972, p. 7).

This researcher, after careful consideration of the data, adopted an eclectic approach to the analysis of this material, and the four categories used are borrowed variously from the literature. The term "extraneous linguistic material" is preferred to "mazes," as it is clear that the speaker is not always tangling his words. "Filler" words and phrases often are used to emphasize a point, agree with a previous speaker, or signify that the user is attending to the theme of the conversation.

The extraneous linguistic material found in the language of the four key subjects was found to be made up of four types. Each is defined below, with examples.

a. Audible Pauses

Audible pauses are used to confirm or affirm a speaker's words, or simply to signify the ongoing attention of the listener in the spontaneous language situation. They are also used at times to signal surprise or to emphasize a statement or response.

Examples of audible pauses: *er; um; ah; oh; err; hum, hum; uh, uh; uh; mm(m); um, um; uh, huh; heh.*

b. Filler Words and Phrases

Filler words and phrases are those expressions that speakers often use to cover a break in the discourse while they are structuring their utterance or trying to recall a name, word, or thought. Sometimes they are also used to elicit an affirmation or confirmation from the listener(s), or to engage or maintain the attention of the listener(s). Sometimes a filler word is used with an audible pause, as in these examples: *Oh man; Oh well.*

Each example was counted as one filler utterance.

Examples of filler words and phrases: *such as; like; kind of; well; for all you know; you know; man; what is it; I mean; what was it; Ho-ly; what happened next; what did we do; hey; anyways; or something; or somebody; maybe; I think; let's see; kinda; after all that.*

In the transcripts filler words and phrases were isolated and identified as follows:

F
1. *. . . we were on the pole, you know, over*

F
2. *Oh, man, they were bad.*

F
3. *I felt really tired, like, I told you I had a headache . . .*

F
4. *and the . . . what is it . . . we were*

F
5. *remember that thing, I mean Tracey did?*

F
6. *her teddy bear, and herrr . . . what was it . . . pillow*

F
7. *and . . . what did we do, we played that game*

F
8. *there was a picture of this girl, and, um, what happened next, um*

c. Repetitions

Repetitions are sometimes parts of edit mazes. They signify a language tangle or hesitation, or a restructuring of a thought. Repetitions can be of words, part of words, or of phrases. Sometimes a repetition will include a filler word or an audible pause. In such cases the utterance was counted as one repetition.

Examples of repetitions and their identification in transcripts:

Rep.
1. *Carol, Carol Newton*

Rep.
2. *. . . and then she didn't, she didn't*

Rep.
3. *That was good . . . that was really good*

Rep. F
4. *Pr . . probably there's gonna be kinda cold, . . .*

Rep.
5. *You know when we . . when we helped Jeff with his papers?*

d. Edit Mazes

Edit mazes are also called false starts by Walker (1973, p. 224). These are words, phrases, clauses or sentence fragments that are suddenly abandoned and a fresh start made. Edit mazes are usually followed by a corrected version of the original start which is tangled and sometimes repetitive. Edit mazes often include other types of extraneous linguistic material, such as audible pauses and/or filler words and phrases and/or repetitions. In such cases the types are not counted separately, but the entire utterance is counted as one edit maze.

Examples of edit mazes and their identification in transcripts:

EM
1. *they showed my mom - they showed Lori . . .*

EM
2. *and then, in the morning, um . . . no in the middle - and then at . . .*

EM
3. *that trick Tracey - he did?*

EM
4. *I liked that part where we were sitting on the stairs - on the steps*

EM
5. *Yeah, but I don't have . . . I don't really have that much.*

EM
6. *. . . service desk, and oh - but that was so funny.*

EM
7. *The first - when I first walked in to . . .*

Procedures Followed in Special Circumstances

a. audible pauses

Where two audible pauses occurred together, as in "um - oh," it was counted as one instance of an audible pause occurrence.

b. filler words and phrases

Where two filler utterances occurred together, as in "like I mean," it was counted as one instance of filler usage.

c. repetitions

Some repetition is used deliberately for emphasis, and is not an example of maze-type language.

e.g. *Right, right, right.*

In the summer. In the summer.

Such obvious and deliberate repetition was not marked as an extraneous linguistic material occurrence.

All extraneous linguistic material was circled and identified by one of the following four descriptors. The examples used for each type of extraneous linguistic material in this section show the use of the descriptors.

AP - audible pause

F - filler word(s) or phrase

Rep - repetition

EM - edit maze

2. SEGMENTATION OF C-UNITS

When Loban (1976) isolated the maze-type material in his transcripts of children's oral language he found that the remaining material constituted a straightforward and easily recognizable unit of discourse. Such was not the case in this study. In the Loban study the children's language had been collected individually in the presence of an adult investigator. In the present study children are interacting among themselves with no adult present.

Loban defined the C-unit as each independent clause with its modifiers. The C-unit, and its variant the T-unit or "minimal terminable unit" (Hunt, 1965, p. 21) has been used as the basic unit for syntactic analysis because it has been a much-used and reliable measure of children's oral language. O'Donnell (1976), in a review and critique of the current indices of syntactic maturity, stated that the T-unit probably remains the most useful and useable index of syntactic development over a wide age range.

To account for the utterances in the present study, which in many instances did not clearly constitute a recognizable unit of discourse when extraneous linguistic material was isolated, it was found useful to utilize the guidelines outlined by Loban in his initial research report (1963). Also, the guidelines adopted by Anderson (1972) and Walker (1973) proved helpful in the drawing up of guidelines for this study.

The following four rules, then, guided the investigator in the segmentation of C-units. They are reported by Loban (1963, p. 10).

1. Every utterance must contain at least one C-unit. Therefore an utterance which is not an independent clause but which is preceded and followed by (terminal) silence on the part of the speaker is arbitrarily defined as a C-unit.
2. The material between terminal silence and terminal silence contains at least as many C-units as it contains independent clauses. Every independent clause is a C-unit; no C-unit contains more than one independent clause.
3. In a stretch between terminal silences, material which

precedes, separates, or follows independent clauses constitutes either extraneous linguistic material or further C-units. Every stretch of this material which constitutes an elliptical independent clause (such that it could be expanded into an independent clause by the simple repetition of words from the context) is a C-unit.

4. A word such as "yes" or "no" is a separate C-unit when it could be replaced by an independent clause. It is not a separate unit when it could not be replaced by an independent clause but merely introduces such a clause.

Contractions of two words into one counted as two words. Slash marks (/) were used to enclose C-units in the transcripts, and both the number of C-units and the number of words per C-unit were computed for each key subject. Loban's directions for counting quotations were adopted by this researcher, as detailed in Appendix C of the 1976 research report. Actual quoted sequences were subjected to C-unit segmentation and C-units were counted, then one additional C-unit was allowed for the total quotation. In addition to, or expanding upon, the above four guidelines, the researcher developed the ones to follow.

Guidelines for Segmentation of C-units

1. There were many instances when fragments and incomplete sentences were given as answers to questions, where the speaker was interrupted before he/she could finish an utterance, or when another child interjected to supply a phrase or sentence fragment to complete the previous

speaker's utterance. In these cases the interrupted utterances were counted as C-units, since they were complete units of communication within the overall context. Where another speaker completed the previous speaker's utterance, the completion was counted as a separate C-unit.

2. "So" began a C-unit if it could be substituted with "therefore."
3. When "except" was synonymous with "but" it began a new C-unit.

   e.g. *It's just like handball,/except you use a racquet.*
4. Having a C-unit embedded within a larger C-unit was possible.

   e.g. (The embedded C-unit falls between the double slash lines.)

   F

   /and . . . after we left - like I mean // I walked

   Rep

   with Debbie - // and after we left Debbie looked at me /
5. When the meaning of an utterance indicated that a subordinate conjunction had been omitted, the clause involved formed a new C-unit and the omitted conjunction was inserted and not counted as a word in the C-unit word count.
6. Where two "yeah" or "okay" etc. utterances occurred together between terminal silences they counted as only one C-unit.

e.g. *'kay, 'kay.*

Right, right.

Yeah, yeah.

3. NUMBER OF EXTRANEOUS LINGUISTIC MATERIAL UNITS

All occurrences of all four types of extraneous linguistic material were counted and totalled for each subject in each task situation. The number of ELM units was the number of occurrences of extraneous linguistic material in the transcripts. This count was separate from the count of all extraneous linguistic material.

4. COUNT OF EXTRANEOUS LINGUISTIC MATERIAL

All those items defined as extraneous linguistic material, that is, audible pauses, filler words and phrases, repetitions, and edit mazes or false starts, were counted and totalled for each key subject in each task situation. In other words, the ELM count included all individual items within ELM units. The procedures for counting all words that were segmented with ELM units are the same as for the Lexical Word Count.

EM
e.g. *It's a* - = count of 3

F
Well . . . ah = count of 2

5. LEXICAL WORD COUNT

The lexical word count was used as a measure of linguistic dominance and was also used to compute lexical density. Linguistic dominance is defined as social dominance or role dominance expressed in the quantity of language used in the situation. The lexical word count is the number of words other than extraneous linguistic material in the transcripts. Extraneous linguistic material is not included because it has been accounted for in a separate count. All words in the lexical word count form parts of C-units. Each orthographical (that is, spelled) word or word part was counted. Words or single utterances, including parts of words, were counted. The one exception was hyphenated words, which counted as two words.

Lexical word count should not be confused with either the Lexical Content Words Count or the C-unit Word Count, the latter being used for syntactic purposes.

Procedures Followed in the Lexical Word Count

1. Hyphenated words counted as two or three words.

   e.g. *what's-her-names; six-fifty.*

   Hyphenated parts of words counted as two words because they are uttered as distinctly separate phonological items.

   e.g. *Gate-way; Fusi-rama.*

2. Contractions were counted as one word.

   e.g. *where's; we'd; you've; Mrs.; I'd; ad (advertisement).*

3. Compacted words counted as one word.

   e.g. *gonna; 'em (them); 'n (and).*

4. Compound words, unless hyphenated in written transcribed form, counted as one word.

   e.g. *Storyland; everybody; Battleship; pingpong; righthand.*

5. Acronyms or initials counted as one word, since the letters are not separated.

   e.g. *DI; MPC; U.S.; D.*

6. Numbers counted the equivalent number of words as spoken.

   e.g. *2½ = two-and-a-half* = four words

7. Foreign words counted as they appeared phonologically.

   e.g. *El Rancho* = two words

8. Where a word was unintelligible but the part of speech was clear, and it was obvious that only one word or part of a word was missing, it was counted as one word.

   e.g. *Professional* ______*ship* = two words

6. C-UNIT WORD COUNT

The C-unit word count was used to compute length of C-units, and then averaged to give mean C-unit length. Thus it functioned as an indicator of syntactic complexity. The directions given by Loban (1976) in his Appendix B were largely followed, but there were one or two important differences. Consequently the investigator will provide in detail the method used for counting C-unit words. All words were counted according to their full spoken equivalence. The following examples will illustrate this.

1. Counted as one word: *maybe* (perhaps)
   OK (yes)
   ain't (this word now appears in dictionaries as a one-word lexical entry)
2. Counted as two words: *kinda* (kind of)
   don't (do not)
   haven't (have not)
   gonna (going to)
   wanna (want to)
   all other common contractions

3. Numbers counted their full spoken equivalence.

   e.g. *2001* = four words

4. Acronyms or initials counted as one word.

   e.g. *IMC* = one word

7. LEXICAL CONTENT WORDS COUNT

The lexical density measure required a count of all content words in the texts, and so this count was used for the lexical density measure. The four parts of speech which define lexical content words in this study are nouns, single word adjectivals, verbs, and single word adverbials. These were categorized and counted for each key subject in each task situation.

Single Word Adjectivals is used instead of "adjective" because at times the noun modifier appears in isolation in an utterance, and also at times in an unconventional syntactic position.

Single Word Adverbials is used instead of "adverbs" because at times the verb modifier will appear in isolation or in an unconventional syntactic position in an utterance.

The "single word" qualifier is used to distinguish both items from phrases and clauses which fulfill the same function.

Procedures Followed in the Lexical Content Words Count

Functional words such as "yeah," "yes," "no," "okay," "yea," "good," "right," "yep" are counted separately, and discussed in separate functional analysis.

Nouns: Proper nouns, place names, titles and brand names were all counted as one noun item, even when several words formed part of the noun unit.

e.g. *Greaser Days, Carol Newton, Storyland Valley Zoo, Farrah Fawcett-Majors, Star Wars, Billy Jack, Head and Shoulders, Chomp and Bite*

each counted as one noun item.

Where a word was unintelligible, but clearly a noun, such as the name of a character or a person's name, it counted as one noun item.

Verbs: All attached auxiliaries and negatives were counted along with the verb stem as one verb item or unit. In the case of contractions, the full verbal form was considered when counting verb units.

e.g. *where's; we'd go*

each counted as one verb item.

Single Word Adverbials: In some cases the adverb is redundant as used and in such cases was not counted as a separate adverbial item. These instances were not common.

e.g. *woke up; smashed up; divide up; lift up; set up.*

These counted as one verb item only.

Single Word Adjectivals: Where numbers functioned as adjectives, and were quite long in written form, they counted as one adjectival item.

e.g. *six hundred and fifty*

five hundred

Each counted as one adjective.

Hyphenated adjectives counted as one adjectival unit.

e.g. *medium-sized*

full-grown

seventy-five

8. CONTRACTIONS, COMPACTIONS AND TRUNCATIONS

The transcripts revealed what is best described as much evidence of short cuts being taken in oral language. Occurrences were common enough to suggest that a separate analysis be made, and a classification and counting of such items used by key subjects was carried out. Some words may be simply a result of poor articulation and lazy speech habits, but the majority are standard word forms used by all native speakers, that is, contracted word forms. Many of the truncated word forms might be acceptable to the majority of language users in spoken discourse, but would be clearly unacceptable in written form. The acceptability of compacted word forms in either oral or written language is doubtful, though for children the issue of acceptability is not an issue.

a. Contractions

These words could be identified only after transcription of the oral data. Contractions are all words which have an apostrophe denoting missing letters belonging to the verb. Apostrophed words denoting ownership were not counted. Most contractions are commonly-used words in both oral and written language. Several contractions are more colloquial than common, and are categorized accordingly. The decision for categorizing either as a common or colloquial contraction was made by the investigator in consultation with a professor of speech.

Examples of: (a) common contractions

couldn't, didn't, can't, won't, it's, he's, haven't, weren't, Tracey's picture's, I'd, year's

(b) colloquial contractions

what're, that'd, what'd, this'd, ain't, there'd, wet'll

b. Compactions

These are compacted word forms and result when two or three words have been compacted together. Each word loses phonetic and morphemic elements, and in all cases phonetic substitutions have been made. In no cases is an apostrophe used to denote missing elements.

Examples of compactions: *gonna* (going to)
wanna (want to)
whadda (what a)
gotta (got to)
hafta (have to)

c. Truncations (truncated word forms)

Such word forms appear when the initial, medial or final part of a word is lopped off, or cut out, and an apostrophe denotes the omission. Consequently there are three types of truncations: initial, medial, final.

1. Truncation of the final letter(s).

   Phonetically this usually results from a phonetic substitution of the final phoneme "n" for the phoneme "ng."

   e.g. *flyin'; somethin'; sittin'*.

   However, some result simply from the deletion of the final consonant.

   e.g. *an'* (and).

2. Deletion of the initial phoneme.

   e.g. *'em* (them)

   'cause and *'cos* (because)

3. Deletion of the, or a, medial syllable or sound.

   e.g. *s'posed* (supposed)

   prob'ly (probably)

Several other truncations result from taking the first syllable to stand for the entire word.

e.g. *ad* (advertisement)

ed (education)

Two truncations, ya (you) and ta (to) substitute a short vowel phoneme for a longer vowel phoneme.

Where a truncation falls within a name or title, for example, *tug-o-war, Puss 'n Boots,* it is not counted.

No subcategorization of truncations was made, though the several forms are easily recognizable.

9. ELABORATION OF C-UNITS

This method of analysis examines dependent adjectival, adverbial, and noun clauses, as well as prepositional phrases. Subordination was chosen rather than simple coordinate statements connected by "and" or "but" because it is a more mature and complex form of syntactic structure. Subordination makes possible a more coherent organization of related statements.

It was decided to include prepositional phrases because they are the most prevalent types of phrases used. Speakers (and writers) replace dependent clauses with phrases of all kinds, with prepositional phrases being most common. A more detailed analysis of syntactical elaboration, going beyond clauses and prepositional phrases, was considered unnecessary following Loban's finding. He reported that his complex and time-consuming elaboration index validated the much simpler and easier count of average words per C-unit (1976, p. 59). Consequently the measure of average words per C-unit was preferred for use in this study.

Clauses were considered to be those expressions that contain a subject (or coordinated subjects) and a finite verb (or coordinated finite verbs). The distinction between main clauses and subordinate clauses was made on the formal basis discussed by Hunt. A subordinator relates its clause to another on either its left or right, whereas a coordinator relates its structure to another on its left. A coordinator can relate across a sentence boundary whereas a subordinator never can (1965, pp. 74-75). Coordinators can relate C-units to one another while subordinators can only relate their own clauses to another clause.

All subordinate clauses within C-units were underlined in the transcripts and the subordinate clause(s) was/were identified by type: N for noun clause, Adj. for adjectival clause, and Adv. for adverbial clause. Prepositional phrases were underlined with a wavy line and identified by PP. Then a count was made of all subordinate clauses by type, and of all prepositional phrases, for each key subject in each task situation. The length of each subordinate clause was also recorded.

10. TYPE-TOKEN RATIO

A useful method of looking at lexical breadth is the type-token ratio (TTR). It is a measure of the diversity of vocabulary, and is the ratio between the number of different words used by a subject (types) and the total number of words in a sample (tokens). The TTR has been used by a number of researchers are found to be a useful measure of lexical diversity. (See Fairbanks, 1944; Loban, 1963; Horowitz and Newman, 1964; Walker, 1973).

When computing the TTR an important characteristic of the measure must be considered. Since the number of different words (types) decreases as successive increments are added to a language sample, the number of tokens used in computing the TTR must be kept constant in order to make the ratio compatible from one sample to another. On hundred words has been accepted as the standard number of tokens, and this number will be used here.

Procedure for Computing the TTR

In each task situation for each key subject the transcribed oral language was divided into 100-word segments beginning with the first word and counting only the words forming C-units, that is, all extraneous linguistic material was omitted. The procedures outlined for counting words in C-units was used in this computation. In addition to the C-unit word count procedures it was necessary to adopt and apply these additional procedures:

1. Truncations count as one lexical item along with their full form.

   e.g. *goin'* is counted with *going*

   'em is counted with *them*

2. Contractions count as one lexical item as they appear orthographically.

   e.g. *wasn't, didn't, can't* each count as one token

3. Where both occur in a TTR segment, words with apostrophes of ownership count along with the same noun without the apostrophe.

4. a. Yea, Yep and Yeah are counted together.

   b. Ya and You are counted together.

5. Numbers count as one token.

   e.g. *2½* = one lexical item, except where the full wording occurs, viz.

   six hundred and fifty = four tokens.

6. Hyphenated words count as equivalent single tokens.

   e.g. *six-fifty* = two lexical items

cross-country = two lexical items

full-grown = two lexical items

7. Plurals of words count along with the singular of the same word.

The number of TTR segments (of 100 words each unless specified) is shown in the following Table 1.

From Table 1 it can be seen that with the exception of two cells the minimum number of TTR segments available for analysis per cell is four. Therefore it was decided to use four segments from each task situation for each key subject to provide a ratio, and then to average the four ratios for a final measure of comparison. Where there were less than four segments, all segments and parts of segments were used. With cells having eight to eleven segments, every second segment was used. In the cell having nineteen segments every fourth segment was used. For Task 4 the TTR was computed separately for the presentation part and the question-answer part, in both instances using all segments and parts of segments where the number of segments was less than four.

11. LEXICAL VERB ANALYSIS

The lexical verb analysis is a useful differentiator between speech styles. Lexical verb analysis was used by Chiu (1973) in her study of speech styles in the administrative correspondence and boardroom discussion of Canadian federal government employees. As in the present study she computed the number of lexical verb tokens and the number of lexical verb types (number of different verbs). Chiu found this analysis to be a useful register differentiator.

Table 1

NUMBER OF TTR SEGMENTS IN EACH TASK SITUATION FOR EACH KEY SUBJECT

	Task Situation			
Key Subject	1	2	3	4
M.	9	4 (+93 words)	5	9
Ba.	19	4	(95 words)	5
C.	11	10	10	4 (+65 words)
By.	11	5	(70 words)	3 (+97 words)

Lexical verb analysis is a measure of the use of verbs by key subjects in each task situation. The type-token ratio (TTR) is used to compute the measure. All single verb words are counted, so that auxiliaries and negatives all count separately, and contractions count separately also. Thus the procedures for counting verb units in the Lexical Content Words Count are not applicable in this analysis. The lexical verb analysis gives another means of analyzing the use of verbs.

All single word verbs were extracted from the text and divided into segments of 100 words. Table 2 shows the number of segments available for analysis. The first three full or two full and partial segments in each task situation for each key subject were used to compute the TTR. In most cases this comprised the total number of verbs in the text. Where a partial segment contains 50 or more words it is computed. If it contains less, it is considered too small a sample. In Task 4 the first two full or partial segments were computed for both the talk segments and the question-answer segments.

12. SUBJECT MATTER MAINTENANCE AND SWITCHING

In order to determine the particular subject topics chosen by the speakers, and how subject topics were sustained and switched during the course of the task situation, the investigator carefully analyzed each task situation. He considered all language in the tasks, not just that of the key subjects. Each instance where a new subject topic was introduced was noted, along with the subject matter, for example, #10, Being Chased in Playground Today (G1, T1). From the language context it was also possible to classify the subject matter

Table 2

NUMBER OF TTR SEGMENTS AVAILABLE FOR LEXICAL VERB ANALYSIS

Key Subject	Task Situation 1	2	3	4 Talk Segment	4 Q-A Segment	4 Combined Segment[a]
M.	2.50	1.20[b]	1.11[b]	1.11[b]	0.77	1.88
Ba.	4.80	1.06[b]	0.19[c]	0.50	0.46[c]	0.96
C.	2.90	2.68	2.60	0.83	0.41[c]	1.24
By.	3.04[b]	1.49[b]	0.13[c]	0.60	0.34[c]	0.94

[a] Combined Talk plus Question-Answer segments to provide a total Task 4 TTR segment.

[b] Where a partial TTR segment is less than .50 no analysis was made.

[c] Too small to calculate.

as a shared personal experience, a shared school experience, an individual experience, a shared personal opinion, a shared planning experience, shared humour, etc.

Therefore, each task situation was scanned for subject matter content. Whenever a new subject topic appeared it was noted, named, and classified according to experiential base. The investigator then looked for groupings of subject matter, including returning to previous subject topics, as well as grouping of experiential bases. It was hoped that patterns would appear that showed predominance of subject topics and experiential bases.

The data upon which discussion of subject matter maintenance and switching is based is to be found in Appendix C, and the categories of experiential bases appear at the beginning of the subject maintenance and switching discussion in Chapter 5.

Validation of the System of Analysis of Subject Matter

The system as developed by the investigator from the transcripts was given to two professors of language arts. Each professor was also given one-half of the data. The system validated consisted of the material which makes up Appendix C, that is, all of the subject matter categories, as well as the categories of experiential bases, which appear in Chapter 5. Each validator was given the following questions with which to undertake the task of validation:

1. Is the system developed descriptive of the data?

2. Are the categories representative of the data, that is, are the implications for experiential bases and subject matter valid

ones?

3. Is the system developed and its categories fully inclusive of the data?

In answering these questions several important points were made which enabled the investigator to discuss the analysis more fully. The necessity of grouping the subject topics by theme and then looking for general themes which were pervasive was discussed. It was also noted that a child calls on several different experiences at one time, and at time several experiential bases have been used with one subject topic.

There were real problems which arose from the categorizing of subject matter, and most of the issues raised concerned the experiential bases categorization system. One validator suggested that a direct/indirect system might be another way of describing the experiences from which topics arose. There was confusion about the general category of Personal and its subcategory of Personal experience. These were changed respectively to Self and Individual experience, and this solved many problems. One coder suggested that it would be helpful to have divisions of Individual experiences.

One coder suggested that it might be necessary to distinguish between an activity and an experience. This coder referred to the Planning experience category, and his point was that the activity is planning, but the experience needs to be identified. This same coder also stated that the Humour category could be subdivided into humour that arises from the present situation, and humour that arises from the recalling of past experiences such as television and movies.

A final point was made regarding the subject matter. One coder noted a tendency which she called a "subject maze," where the children talked around in a maze-like manner before getting down to the heart of the topic. She thought that what the children were doing was thinking around for the particular point which they really wanted to discuss. She noted this tendency in the topic described as Grade Four in Task 1, Group 1 (girl dyad).

Both coders agreed with the investigator that the system needs to be developed further, and that such a development would constitute a worthwhile study in itself.

13. NONLINGUISTIC FEATURES OF COMMUNICATION

A scheme for classifying and categorizing all nonlinguistic features was developed from the data which was fully descriptive of that data, that is, of all subjects in all task situations. Nonlinguistic features include eye contact, hand and arm gestures, leg and foot movements, head movements, body movements when seated or standing, eyebrow movements, and facial expressions. The system is described in detail in Chapter 5, and examples of the categories and types are provided in Appendix D. Validation procedures were carried out and are described below.

Three major points need to be made about the system for describing nonlinguistic features. The emphasis in coding is on the active features where there is movement either of a functional or nonfunctional type. Passive features, such as hands clasped in lap, or resting head in right hand, elbow on desk, are not meaningful as nonlinguistic features; they are merely physical poses of the subjects.

Second, phonetic features such as tone of voice or stress patterns are phonostylistic features and are not considered part of nonlinguistic material for coding. In the transcriptions of nonlinguistic features references are sometimes made to voice tone and stress, and these are included only to enhance the description of nonlinguistic features.

The third point concerns the degree of explicitness of certain of the nonlinguistic features. Some features are quite explicit and appear directly related to the speech itself. Other features are less explicit and require a degree of inferencing on the part of the coder. In such cases of inferencing the linguistic context is of great help to the coder, as is the action of the speaker and other speakers which lead up to the particular nonlinguistic feature being focused upon.

The system developed is equally appropriate to all the task situations created in the study. Several problems had to be overcome in arriving at an all-inclusive system. The major problem arose when the investigator attempted to quantify the features and occurrences of each. One particular instance of nonverbal communication might, and in some instances must, be coded in several different ways if it is to be fully described. For example, a particular instance might involve eye contact, head movement, and hand gesturing all at once. It also became apparent that individual traits and behaviour patterns, as well as personality factors, played a major part in the types of nonlinguistic features used by subjects.

No attempt is therefore made to quantify the data. The system is to be considered a descriptive one. The presentation of the data is made in such a way that it is fully descriptive of the nonlinguistic features of communication, both functionally and nonfunctionally. It allows for discussion of trends within and between task situations, and it allows for consideration of the personality characteristics of individual key subjects.

Validation of the System of Analysis of Nonlinguistic Features

The system as developed by the investigator was given to two doctoral students in the fields of curriculum and language arts, both of whom have had considerable experience in the videotaping of children and coding from videotapes. Each coder was also given one-half of the data. Along with the system for identification and classification the investigator gave examples of the categories, and demonstrated how he had identified and categorized the features.

The investigator asked each validator to answer each of the following questions:

1. Is the system developed descriptive of the data?

2. Are the categories developed representative of the data, that is, are the implications made from the nonlinguistic features valid ones?

3. Is the system and its categories fully inclusive of the data?

The coders were able to answer these questions to their own and to the experimenter's satisfaction and at the same time provided some important refinements which the investigator has incorporated into the system. One concerned the addition of a functional and a nonfunctional category for movement of feet and legs. Others concerned the need to make explicit the fact that phonostylistic references were not part of nonlinguistic features, that active and not passive features were the focus for coding, and that degrees of inferencing were at times necessary when interpreting the intent of nonlinguistic features.

RELIABILITY OF ANALYSES

Reliability checks were carried out on the four most difficult types of analysis, and five reliability procedures were undertaken. Three raters were asked to identify all extraneous linguistic material in five pages of transcripts, and then to identify each type of ELM in two of these pages. Using the same five pages the coders were then asked to unitize the language, minus ELM, into C-units, to identify noun, adjective and adverb dependent clauses, and finally to identify prepositional phrases outside of dependent clauses.

The three persons used as reliability coders were doctoral students, two in the field of reading and one in language. The investigator used two additional pages of data to illustrate each of the procedures, and the coders were given one additional page of data as a practice page. Those who wished could check their coding on the practice page with the investigator before proceding with the five pages. The five pages were made up of two pages from the girls' intimate group and one from a girl's formal presentation. There was one page from the boys' intimate situation and one from a boy's formal presentation. These situations provided a maximum of linguistic material and gave examples of each type of analysis.

No major problems were encountered by any of the raters. The five pages used for the reliability procedures appear in Appendix E as examples of coded data sheets. Agreements and disagreements between each of the raters and the investigator were computed, and this information is given in Table 3. Using the Arrington formula (in Feifel and Lorge, 1950), percent agreements between the investigator and each rater were computed, and are reported in Table 4. In the Arrington formula, agreement between rater and investigator is doubled and this figure is divided by the total of double agreement plus disagreement, that is:

$$\frac{2 \text{ x Agreements}}{(2 \text{ x Agreements}) + \text{Disagreements}}$$

The frequencies for types of ELM were too small to apply the formula, and the information contained in Table 4 shows high agreement. The percent agreement for the rows of totals in Table 4 range from 85 to 100, and this indicates a satisfactory reliability of coding.

Table 3

RELIABILITY OF FOUR ANALYSES
AGREEMENTS AND DISAGREEMENTS WITH INVESTIGATOR(A)
RATERS A, B, C, D

Analysis		Page	A		B		C		D	
			Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
Extraneous Linguistic Material (ELM)		G1 T1 p.7	6	0	6	1	6	1	6	1
		G1 T1 p.15	14	0	12	4	10	4	14	0
		G1 T4 p.2	15	0	14	3	15	4	15	0
		G2 T1 p.11	4	0	4	1	4	0	4	0
		G2 T4 p.7	8	0	8	1	8	2	8	0
		Total	47	0	44	10	43	11	47	1
Types of ELM:	Audible Pauses	G1 T4 p.2	5	0	5	0	5	0	5	0
		G2 T1 p.11	1	0	1	0	1	0	1	0
	Filler Words and Phrases	G1 T4 p.2	2	0	2	0	2	0	2	0
		G2 T1 p.11	0	0	0	0	0	0	0	0
	Repetitions	G1 T4 p.2	2	0	1	1	2	0	1	1
		G2 T1 p.11	1	0	1	0	1	0	1	0
	Edit Mazes	G1 T4 p.2	5	0	4	1	4	1	4	1
		G2 T1 p.11	2	0	2	0	2	0	2	0

Table 3 (Continued)

Analysis	Page	A		B		C		D	
		Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
C-Units	G1 T1 p.7	20	0	20	3	18	4	18	4
	G1 T1 p.15	22	0	20	4	18	5	19	4
	G1 T4 p.2	17	0	16	1	15	2	17	1
	G2 T1 p.11	20	0	17	3	19	1	19	1
	G2 T4 p.7	21	0	20	1	19	2	19	2
	Total	100	0	93	12	89	14	92	12
Dependent Clauses	G1 T1 p.7	8	0	6	2	7	1	6	2
	G1 T1 p.15	3	0	2	1	2	2	2	2
	G1 T4 p.2	4	0	4	0	3	1	4	0
	G2 T1 p.11	4	0	4	0	4	0	4	0
	G2 T4 p.7	6	0	6	0	6	1	4	3
	Total	25	0	22	3	22	5	20	7
Prepositional Phrases	G1 T1 p.7	2	0	1	1	2	0	1	1
	G1 T1 p.15	4	0	4	0	4	0	4	0
	G1 T4 p.2	10	0	10	0	8	2	9	1
	G2 T1 p.11	3	0	3	1	3	0	3	1
	G2 T4 p.7	1	0	1	0	1	2	1	0
	Total	20	0	19	2	18	4	18	3

Table 4

RELIABILITY OF FOUR ANALYSES
PERCENT AGREEMENT WITH INVESTIGATOR(A)
USING ARRINGTON FORMULA
RATERS A, B, C, D

Analysis	Page	Percent Agreement with Investigator		
		AB	AC	AD
Extraneous Linguistic Material (ELM)	G1 T1 p.7	92	92	86
	G1 T1 p.15	86	83	100
	G1 T4 p.2	90	88	100
	G2 T1 p.11	80	100	100
	G2 T4 p.7	94	89	100
	Total	90	87	98
C-Units	G1 T1 p.7	93	90	90
	G1 T1 p.15	91	88	90
	G1 T4 p.2	97	94	97
	G2 T1 p.11	92	97	97
	G2 T4 p.7	98	95	95
	Total	94	93	94
Dependent Clauses	G1 T1 p.7	86	93	86
	G1 T1 p.15	80	67	67
	G1 T4 p.2	100	86	100
	G2 T1 p.11	100	100	100
	G2 T4 p.7	100	92	73
	Total	94	90	85
Prepositional Phrases	G1 T1 p.7	67	100	67
	G1 T1 p.15	100	100	100
	G1 T4 p.2	100	89	95
	G2 T1 p.11	86	100	86
	G2 T4 p.7	100	50	100
	Total	95	90	92

Chapter 5

THE RESULTS OF THE ANALYSES: FINDINGS

INTRODUCTION

In this chapter the results of the analyses are discussed in the light of their power to discriminate between the task situations. The methods for reporting the analyses vary. Some of the analyses are of quantitative data, and in such cases ratios, percentages and graphs are used. In some cases it has been necessary to use frequencies of feature occurrence for individual key subjects as well as pooled frequency data. Other analyses are reported descriptively rather than numerically.

The analyses are reported in the chapter in the same order as they appear in the Situational Categorization in Chapter 4. The first two analysis results described are those of the subject matter and the nonlinguistic features of communication. These two analyses make up the first part of this chapter. As the two analyses are mutually expansive of one another some cross-referencing is made. The other analyses are reported as per the situational categorization outlined in Chapter 4. They make up the second part of the chapter.

In the discussion of individual key subjects names are not used. The girl dyad is made up of G_1 and G_2. G_1 is identified by M., and G_2 by Ba. In the boy dyad B_1 is identified by C. and B_2 by By.

PART A: SUBJECTIVE ANALYSES

SUBJECT MATTER MAINTENANCE AND SWITCHING

The content of the discourse in each task situation was analyzed to identify the subject matter topics which the children focused upon. The subject topics were then further analyzed to determine what topics were maintained, and to what extent switching from one topic to another occurred. Topics were also clustered around themes such as games/sports/activities in school, social events in school, and special interests.

The secondary analysis of subject topics was in terms of the experiential bases upon which the topics evolved. The categories which were derived from the data are presented below.

Experiential Basis Categories

Shared (when two or more children contribute)

(a) Shared personal experience	(b) Shared school experience
Shared personal opinion	Shared school opinion
Shared personal feelings	
(c) Shared planning experience	(d) Shared humour

Self (when only one child contributes)

Individual experience

Another way to represent the experiential bases is by means of temporality.

Past

- Shared personal experience
- Shared school experience
- Individual experience

Present

- Shared personal opinion
- Shared personal feeling
- Shared school opinion
- Shared humour

Future

- Shared planning experience

Each subject topic is identified with an experiential base, and sometimes several experiential bases are used to identify one subject topic. The data on which these analyses of subject matter and experiential bases are based appear in Appendix C. The subject matter analysis was applied to the total text, that is, the transcribed discourse of all children in all task situations, not merely the key subjects. Each of the task situations was between 15 to 17 minutes long, except for the formal situation, which was much shorter for each of the four key subjects.

For discussion purposes subject topics are grouped by themes, and experiential bases are grouped temporally. The discussion is firstly by task situation, beginning with the intimate situation. Within task situation the discussion is first of the girl dyad group, followed by the boy dyad group. The group discussions focus first on subject topics used, then on experiential bases, and finally on the degree of subject matter maintenance and switching which occurs.

TASK 1

a. Intimate: Girl Dyad

The subject topics of this pair of girls could be clustered around four themes, which are described below along with the number of topic occurrences in each. A topic occurrence is each time the same topic occurs in the same task situation. There was a total of 31 topic occurrences in this particular task situation, which averaged half a minute in length.

1. Games/sports/activities outside of school: 4
2. Games/sports/activities in school: 3
3. Social events outside of the school: 11
4. Social events in school: 13.

The data revealed that the girls focused most of their talk on social events, which included parties, the doings of younger children, party games, concerts, mutual friends, and events in earlier grades. There was equal weight given to school settings and settings outside the school for subject topics.

The experiential bases for subject topics are heavily weighted towards the shared school experiences, with a total of 15, and the shared personal experiences with 12. Individual experiences accounted for four occurrences, and shared planning experience just one. In terms of temporal classification, shared past experiences accounted for almost all of the above subject matter.

An analysis of the data for maintenance and switching showed that subject topics were not sustained for any length of time but three subject topics in particular were dominant. M.'s birthday party appeared as a topic five times, and led into a reminiscing of another birthday party on one occasion. A particular party game was to reappear once as a topic, and school social events of the previous year reappeared many times. These three subject topics all had as experiential bases shared personal and school experiences.

b. Intimate: Boy Dyad

There were 26 different subject topics in this task situation which could be clustered into three thematic groups, one being dominant. The themes are as follows:

Games/sports/activities outside of school: 6
Events in school: 4
Special interests: 16.

From the data it seemed that the boys focused their talk on shared interests, and these were model rocketry, science fiction, and certain television shows. Unlike the girls, events of a social nature and events and activities concerned with school seemed to hold little or no interest.

All the types of experiential bases are represented though one is dominant, that being shared personal experiences with 15 occurrences. Shared planning experiences accounted for five occurrences, while for shared school experiences and individual experiences the counts were four and two respectively. As with the girl dyad group, past experiences were predominant, though planning for future experiences was a second major concern. Present experiences were the fewest. Individual accounts were used very sparingly and accounted for a very small percentage of the speaker's total language. It is probably true that in the intimate situation shared experience and knowledge is essential.

In terms of subject maintenance and switching it appeared that three topics were being constantly brought back for discussion. The scout camp featured twice, science fiction topics featured six times, while television shows and movies (other than science fiction) made up five topic occurrences. Thus one-half of the subject topics were maintained, the other half were the result of desultory conversation. Science fiction material and certain television programs were a shared interest, so there was considerable maintenance of these topics in the task situation.

TASK 2

a. Casual: Girl Dyad + B_3, G_3

For these four subjects the first difference is that the number of subject topics is less, at 24, compared to 31 in the intimate situation. The topics clustered into five general groupings as follows:

Games/sports/activities outside of school: 1
People and events in school: 9
Imagination and humour: 2
People and events outside of school: 5
Television and movies: 7

The shift in subject topics is from personalized and shared subject matter in the intimate situation (Task 1) to more generalized topics, such as school-related and media-related ones. All members of the casual group are certain to have had experiences with such subject matter. School-related subject topics predominate, and these are perhaps the most common topics among group members.

The range of experiential bases also shows a generalized pattern. Experiential bases for the topics can be grouped as follows:

Shared planning experiences:	5
Shared school experiences:	5
Shared personal experiences:	7
Individual experiences:	6
Shared humour:	2

Shared personal opinions and feelings are grouped with shared personal experiences, which results in the total of 25 rather than the subject topic total of 24. The temporal grouping of experiential bases shows that talk about future events has been given greater emphasis over Task 1. These future events concerned school-related rather than individual or outside events. The presence of humour is noted, springing from individual experience. The increased (over Task 1) number of individual experiences as bases is worthy of note.

There was strong evidence of subject maintenance, and less subject switching, along with the decreased number of subject topics compared with Task 1. Greaser Days, both as reminisced and anticipated, occurred as a topic four times. The squirting toothpaste episode led into a humorous occurrence, and the general subject topic of television and movies accounted for seven occurrences, one after the other. This one general subject topic was maintained for almost one-third of the whole task situation.

b. Casual: Boy Dyad + B_4, G_4

In subject topics the trend to a lesser number from Task 1 is again present with 18 compared with 26. The topics clustered in the following manner:

Events and interests outside school: 9

Favourite activities and interests: 6

Humorous accounts: 3

Following the trend of Task 1, and of the girl dyad group in Task 2, the subject matter consists mainly of events outside of school. Presumably the three boys in this situation had had many outside experiences together. Unlike the girls, the boys' interests seemed to be outside of the school environment. It could be that nonschool topics were being chosen which mirrored the generalized experience base. The occurrence of humorous accounts, based on individual experiences, is again worthy of note.

The experiential bases also reveal a shift from Task 1. Individual experiences totalled nine, shared personal experiences were 10, and shared planning experiences were two. In terms of a temporal classification, past experiences once again predominated. Since humorous accounts arose from individual experiences that count is also high. Often an experiential base was coded twice, once as a shared personal experience and then as an individual experience, as individual children talked about their own experience arising from a shared group experience. Shared planning experiences involve the anticipation of future events, or the imaginative extrapolation from a shared experience, such as Monopoly to Anti-Monopoly.

The maintenance of subject matter was heavily pronounced, and there was less switching than occurred in Task 1. Favourite games made up the topic of three occurrences, the scout camp appeared twice, favourite activities twice, the joke shop twice, and humorous accounts three times. In three of the above the subject topic was maintained in sequential occurrences, which was the trend evidenced in the girl dyad group also. The five maintained subject topics accounted for two-thirds of all subject topic occurrences.

TASK 3

a. Consultative: Girl Dyad + B_3, G_3, B_5, G_5

In this situation both the girls' and boys' groups were given a specific topic, that of planning a Commonwealth Games afternoon. The subject matter remains constant, and the topic was maintained steadfastly throughout the task situation. However, there were many subtopics within the main topic, and these were worth analyzing. There were 24 subtopics, all involved with planning for a Commonwealth Games afternoon.

For experiential bases of subtopics, although all subtopics involved shared planning experiences it was evident that the children often referred to past school experiences when planning, such as sports days. Consequently there was a common experiential base. Along with such references to past experiences there were also references to individual or shared team experiences, as well as references to local sports sites. These also made up a common experiential base.

An analysis of the subtopics for subject maintenance showed that athletic events appeared twice, individual and team competition three times, and trophies and medals four times. There were no sequences of subject topic maintenance as occurred in Task 2. It will be recalled that the one subject topic was maintained throughout the task situation; there was no subject switching.

b. Consultative: Boy Dyad + B_4, G_4, B_6, G_6

Once again the subject topic of planning for a Commonwealth Games afternoon was sustained throughout. Unlike the girls' group, which was more diverse in its coverage of subtopics, the boys' group covered sixteen. Shared planning experiences was the almost exclusive experiential base, with very few temporal references being made to past shared experiences.

The incidence of humour is there as it was in Task 2, though this did not occur with the girls' group. Humour may have occurred primarily as a result of bravado and the quest for acceptance and popularity in the peer group; there were three subtopics dealing with humour. The predominance of the key subject C. in this situation offers another explanation; he is regarded by others in the group as the leader, and much of the humour emanated with him.

There was considerable evidence of subject maintenance of subtopics, but there was no sequencing of subtopics. Athletic events occurred twice, humorous episodes three times, division of teams twice, timetabling of events twice, and games celebrations twice. The boys' group did not attend to the task as seriously as did the girls, nor did they view the task in as broad a perspective. This was evidenced by the episodes of humour and the lesser number of subtopics.

TASK 4

a. Formal: G_1, G_2

In this task situation all four key subjects addressed an audience of twelve in a formal setting. The subject matter had been preselected by the key subject but fell within the general subject matter criteria. Talks were prepared in advance. M. chose to talk about her interest in Boxer Dogs, while Ba. talked about the sport of Badminton. The chosen subject topic was the only one discussed.

There were no subtopics to analyze as the task requirements resulted in a presentation which was logically ordered with a tightly-interwoven factual content. At times both speakers referred to individual experiences to illustrate a point or to provide an example. This was not unexpected because the topics chosen were of particular interest to the individual presentors. At times shared personal experiences were related, though these experiences were shared with people other than audience members, that is, family or personal friends. Subject maintenance was total, with one subject topic being maintained throughout.

b. Formal: B_1, B_2

Much of what is described for the two girls is also true for the two boys. C. chose to discuss his favourite topic of Model Rocketry, one which had appeared prominently in the other task situations. C's dominance as a leader in all situations is evidenced by the choice of subject matter in task situations. By. chose a personal interest of his, that of Domestic Shorthaired Cats. Subject maintenance was total; there was no subject switching.

Both key subjects introduced individual experiences as means of illustrating their talks. Both speakers also used shared personal experiences, and both related these experiences to each other, so that in the talk C. elicited the attention and confirmation of By. by alluding to a shared experience with rockets, and likewise By. with cats. This phenomenon is of much interest because even in the formal situation the intimate nature of a social bond overshadowed subject matter and situational constraints.

SUMMARY

The analysis of subject matter allowed for differentiation between task situations and thus levels of formality. The levels of formality represented in the study ranged from intimate to formal and include intimate, casual, consultative, and formal. These are the descriptions used for the four task situations. Subject matter was more diverse and greater in number of topics in the intimate situation, and decreased to the one subject topic in the formal situation. Subject topics were fully maintained in the formal and consultative situations, but less so in the casual and intimate situations. Subject matter was able to range freely in the first two task situations but not in the consultative and formal situations.

Shared personal experiences dominated the experiential bases of informal situations while there was greater use of individual and planning experiences in more formal situations. The girls' groups tended to focus more on school events and social events outside of school while the boys tended to prefer individual interests, hobbies and sports activities. Television shows and current movies held the interest of both groups in casual situations.

Humour was used to maintain some degree of informality in formal situations, but if used at all in an informal situation it is in a low-keyed manner. Humour was also used by the boys' group to foster peer group relationships. In the intimate situation humour was covert, and the presence of humorous experiences was instantly shared without need for overt verbalization.

In larger groups and in more formal situations a common experiential base was usually sought, and school-related events or the mass media usually made up this base.

In more formal situations subject maintenance was total or present to a much greater extent than it was in informal situations. In more formal situations subject topics or subtopics were sequenced to the point of total maintenance in the formal situation. With this progression to total subject maintenance there was also a shift from shared personal experiences in the informal situations to individual and planning experiences, and humorous episodes, in the formal situations.

NONLINGUISTIC FEATURES OF COMMUNICATION

An analysis of nonlinguistic features was undertaken in order to capture the meaning and information that is conveyed in situations but which is not available through transcriptions of language. In the development of a system for analyzing nonlinguistic features several difficulties had to be overcome. The sample data given in Appendix E illustrate how the problem of recording and matching both linguistic and nonlinguistic features was tackled. In Appendix D there are examples given for all of the categories of the nonlinguistic features analysis. In this chapter the system of analysis is described as it was developed from the data. The data are contained in the 187 pages of transcripts which have been prepared.

The investigator began with a count of each nonlinguistic feature, identifying it as functional or nonfunctional, and then assigning the feature to a subcategory or creating a new subcategory for it. It was found that several features were used simultaneously, such as eye contact with hand gesture with facial expression, and so one instance could be recorded in three different ways. After all nonlinguistic features had been coded it was evident to the investigator that rather than looking for distinct differences across tasks which could be attributed to task differences, personality differences between key subjects were more salient and interesting.

The categories developed for nonlinguistic features are descriptive of all four task situations in the study. In the discussion following the description of the system of analysis, the particular characteristics of features in each task situation are focused upon. Individual behaviour in nonlinguistic features of communication makes up an important part of the discussion.

Description of Nonlinguistic Features of Communication

A. Functional Features

Functional features fulfil a semantic function in that they add meaning to a linguistic utterance which is synchronous with the nonlinguistic feature, or they supply the total meaning when there is no linguistic utterance. Functional features form an integral part of the utterance or of the communication. They are an adjunct to, or a substitute for, words.

a. Positive Eye Contact
    1. to engage the attention of a listener or listeners;
    2. to display interest in a speaker's words;
    3. to mutually agree about and recall/share an incident;
    4. to seek confirmation of a statement or to confirm a statement; to elicit reaction;
    5. to address a question to a listener;
    6. to invite a listener's contribution or question.

b. Negative Eye Contact (looking down or away)
    1. when thinking of an incident (e.g. "Can't remember now—what?";
    2. when questioning the statement of a speaker;
    3. when expressing surprise or disgust (e.g. "Oh well!");
    4. to signify a characteristic such as innocence or disinterest or disengagement.

c. Eyebrow Movement (eyebrows raised or lowered)
    1. to display surprise;
    2. to display sudden and extraordinary interest;
    3. to question and/or disagree;
    4. to emphasize a word or point;
    5. to seek agreement.

d. Facial Expression (other than eyes and eyebrows)
    1. to show distaste and displeasure when unpleasantness enters into the conversation;

2. to articulate words quoted from another person; exaggerated lip movements, and mouthed words;
3. to mimic expressions used by other people, or even of animals;
4. to question a statement (frowning), and to express uncertainty;
5. to show enthusiasm or excitement, even surprise; to show sudden understanding;
6. to show disapproval;
7. when thinking deeply (frowning);
8. to signify "I don't know," equivalent to shrugging of shoulders;
9. to show concern;
10. to denote seriousness or graveness.

e. Gestures with Hands and Arms to Signify Objects and Incidents

1. type of;
2. size of;
3. shape of;
4. movement of (plane of movement, speed of movement, type of movement);
5. direction of movement (up, down, forwards, backwards);
6. counting off objects or incidents as named;
7. location of, direction of;
8. manipulating and using object (e.g., gesturing using key to unlock a door);
9. describing incidents by "drawing" with finger(s) on table;
10. holding up objects for display (in Task 4).

Often the gesture replaces or is a substitute for a word.

Sometimes the gesture is used and the word cannot be brought to mind. In such cases the listener will usually supply the word suggested by the gesture.

f. Gestures with Head Movement

1. nodding for a "yes" or "no" (agreeing or disagreeing);
2. to functionalize or dramatize, when often the action substitutes for words;
3. when in thought, pensive (head lowered or raised toward ceiling);
4. when sudden thought occurs; sudden agreement or disagreement (toss of head back);
5. nodding to indicate direction;
6. to count off objects or repeated words, by a nod of the head for each;
7. nodding head to a listener to indicate recognition to speak.

g. Gestures to Suggest Movement and Actions of People

1. demonstrate type of movement (crawling, walking, running);
2. demonstrate direction of movement (up, down, rising, falling, backwards, forwards, entering, leaving);
3. to count off people or the actions of people;
4. mimic another person and/or his actions.

h. Gestures to Gain the Attention of Others in the Group

1. to invite a listener to recall a shared experience (remember when?);
2. to add new information to a current topic or incident;
3. to introduce a new topic or to close a topic;
4. to emphasize a point or to display excitement;
5. to seek agreement;
6. to interject in order to speak (e.g., tapping fingers

on table, waving arm in air);

7. to recall a piece of information (e.g., by clicking fingers together);

8. to include or embrace a listener in a friendly, even intimate way.

i. Torso Gestures

  1. shrugging of shoulders

    a. to defend one's words when challenged;

    b. to ask a question, which is often rhetorical;

    c. in an "I don't know" attitude;

  2. straightening up

    a. to introduce a new topic or incident;

    b. to strongly agree or disagree;

    c. to show sudden interest and enthusiasm;

  3. leaning forward

    a. to share in a mutual experience;

    b. to agree with or show extraordinary interest in a topic of incident;

  4. leaning or sitting back

    a. to indicate surprise or shock

    b. to address a question to a listener

    c. to emphasize a point.

j. Foot and Leg Movement

  1. when correcting one's self.

k. Laughter and Grinning

  1. to share a humorous statement or incident;

  2. to denote derision of a statement or opinion;

3. to share an embarrassing situation, sometimes as if to expunge it;
4. to snicker at one's self when a self-evident statement is made.

1. Total Meaning

No words are exchanged or uttered, but the gestures and actions carry full and mutual understanding as evidenced by the reactions of both persons or all persons.

B. Nonfunctional Features

Nonfunctional features do not offer any meaning and are not used to convey meaning. Thus they are not necessarily synchronized with any linguistic utterance, and are quite likely not even recognized by the user or other participants in the language situation. Many nonfunctional features are made up of nonconscious actions, and may be nervous or habitual actions. Some may function in the same way as do filler words and phrases, though a full-scale study in itself would be needed to determine that. Personality characteristics play a big part in the adoption and use of nonfunctional, nonlinguistic features of communication.

a. Negative Eye Contact (looking down or away)

A personality characteristic, e.g., C.

1. to cover a temporary lapse in the conversation;
2. when looking down to notes when talking (Task 4) or to read directly from notes (Task 4).

b. Movements of Hands and Arms

1. to scratch head or another part of the body, to touch another part of the body, to adjust hair, rub nose, eye, etc.;

2. to adjust glasses on nose;
3. to adjust clothing, e.g., pulling down sweater; to play with clothing;
4. to play (consciously or unconsciously) with objects;
5. to fold and unfold arms;
6. to tap fingers on table out of nervousness, impatience, or petulance.

c. Movements of Feet and Legs

1. to shift weight from one foot to the other.

d. Torso Movements

1. to rock body from side to side;
2. to sit back, when a subject withdraws from the ongoing discourse;
3. to sit forward, when a subject includes himself again in the ongoing discourse;
4. to move body in the direction of another person in order to listen intently.

Differences in Nonlinguistic Features Use across Task Situations

There are distinct features which stand out in various task situations that are true for all the key subjects, to varying degrees. It is these generalizable features that form the subject of this discussion. As mentioned before, also of interest are the types of nonlinguistic features that predominate in the behaviour of individual key subjects. A discussion of this second important aspect follows the present discussion.

Task 1

In Task 1 eye contact is a dominant feature. With two people seated close together at a table the ongoing close eye contact helps to establish the intimate environment, which is also evident in the subject matter chosen. In the two dyad groups there was always one person who kept almost constant eye contact while the other tended to use eye contact sparingly. The maintenance of eye contact, or the tendency not to make eye contact, seems to be a personality factor. Along with eye contact were eyebrow movement and facial expression. These features were often used to give feedback to the speaker where in other situations verbal feedback was used.

Gestures also played an important part, particularly those arm and hand gestures which signified objects and events. This is consonant with the shared personal experiential base, where gestures have an immediate meaning for the other person in the dyad. Humour is evident from facial expressions such as smiling and often by breaks in the discourse where both children smile contemplatively over a shared experience, or laugh overtly together. Head movements were used often, usually to signify agreement, and this allowed feedback without interrupting the speaker.

Total meaning instances were numerous; in fact, virtually all of these instances occurred in the intimate situation. The mutually shared experiential base allowed for this, where meaning could be drawn from past experiences signalled by a gesture. Whispering also occurred in this situation, and in no others, and this was in conjunction with bodily movement closer to each other.

In the intimate situation there was no evidence of the type of negative eye contact where the person sat back contemplatively or looked elsewhere in thought. The progression of discourse was too rapid, and consecutive turns had to be taken in speaking. Thus the onus was on the listener to attend carefully, as his contribution had to follow in the same topical vein.

Task 2

Eye contact in the casual situation was less important as a feature used by the speaker, but when someone was speaking it was usual for all others to look to him. This was especially so when the speaker was the dominant member of the group, such as C. was. It should be made clear at this point that the key subjects were not necessarily the dominant group members. C. was a leader, but By. was definitely subdominant as was Ba., particularly in the group situations other than the intimate situation.

The interesting feature of the casual situation is that when a speaker made an utterance that utterance was usually addressed to a particular person in the group, though of course it was intended for everyone. This was not always the case and the transcripts sometimes read "speaking to no one in particular" or "addresses no one in particular." There were also occasions when conversations became split and two streams of conversation persisted together. Such occurrences did not last long. On another occasion one pair of children would converse together while the other two looked and listened. This too was shortlived.

Gestures to gain attention appeared in this situation. To gain attention to speak it was at times necessary to tap on the table. Linguistically the same function was performed by raising the voice volume. Gestures involving the hands and arms to signify objects and events were prevalent. As evidenced by the subject matter there was a strong base of common experience, and so such gestures were appropriate.

To signify agreement and mutual understanding head movements were often superceded by eye contact, so that a mutual glance sufficed to confirm or agree. This might occur between a speaker and a listener or between two listeners.

With the subject matter shift to a more common experiential base from Task 1 to Task 2, namely television shows and movies, the gestures which signify the movements and actions of people became dominant. These gestures carry less meaning than do many other gestures because they depict a character or event, and they act as a reminder of vicarious experience rather than personal experience. Such gestures entertain rather than impart meaning.

Whole torso movements were also apparent in this task situation. Children were more likely to sit back or forward on their chairs, and to turn their heads in the direction of a particular person whom they wished to address. Leaning back sometimes had the function of removing one's self from the ongoing discourse, while leaning forward re-engaged participation and interest in the ongoing discourse. The casual situation allowed a person to contemplate and think without sabotaging the conversation.

Gestures to signify when another person in the group is to be addressed, or requesting a response or attention from another member of the group, also occurred in this situation. The gestures were in the form of pointing a finger or elbow, and leaning toward or turning toward the person.

Task 3

In the consultative situation eye contact was made primarily when one person was addressing another. Nonspeakers often looked to the speaker, particularly if the speaker was a dominant group member, akin to the chairman of a committee meeting. Eye contact was also used to elicit support and agreement, and the child's closest ally or friend was then chosen. When a speaker was making a general statement he would look at no one in particular, and would even look away or up toward the ceiling or down to the table (negative eye contact).

Gestures were used not only to gain attention but also to emphasize points. Nodding agreement was commonly used, which had the effect of spurring the speaker to continue his talk. Gestures were also used to break up the odd private conversation, which was usually based on a disagreement.

Torso movements were used considerably, not merely to engage or disengage one's self with and from the ongoing conversation, but to agree, disagree and emphasize. Nonfunctional movements were also in evidence as nonspeakers shuffled and showed, at times, boredom and disinterest.

Private meanings still took place unobtrusively in the consultative situation. The two people involved used facial expressions and eye contact to effect shared mutual feelings about a topic or a comment. In these instances nonlinguistic features carried a lot of meaning and substituted for many words.

There was considerable latitude for thought and contemplation in the consultative situation, and sitting back in one's seat functioned to allow for such mental activity. Although private meaning took place, total meaning features were virtually absent, and this was true for Task 2 also. The common experiential bases were not available for such nonlinguistic features to function.

Nonfunctional features of a nervous and habitual nature came into play in this situation. The level of formality was obviously such that some children felt nervous when their turn came to say something, or when they were dissatisfied with their contribution. Although a child might have been reticent in the consultative situation, there inevitably came a time when a verbal or nonlinguistic cue was given him to contribute. Censuring one's words was also evident, and once again this was the result of the level of formality of the situation. Nervous actions such as scratching and adjusting clothing were quite prevalent in the consultative situation.

Laughter was certainly less prevalent than it was in the intimate and casual situations, and sometimes laughter was self-deprecatory, arising from self-embarrassment. When a dominant speaker made a humorous statement all other group members usually laughed. Sometimes when the discourse drew to a close and a pause ensued, children looked to each other, and especially to the person unofficially chosen as the group leader, to restore the flow of discourse.

Task 4

In this formal situation each of the key subjects was standing behind a desk and before an audience of twelve classmates. Three of the four key subjects had objects to show, and these were placed on the table. All four had notes to follow, and these were likewise placed on the table. Individual styles of formal presentation varied greatly but there were salient features common to all four speakers.

Eye contact was a feature used very little. Glancing around the audience was the general method of visual contact, but at times a speaker looked towards a certain segment of the audience, probably because that segment was comprised of (a) close friend(s) who could offer support in the formal situation. Eye contact was made with a specific audience member only when a question was directed in either direction. When the question came from the speaker it was inevitably to elicit support; e.g., both C. and By. asked rhetorical questions of each other in their respective talks merely to seek support and an easing of the formality in what was a somewhat tense situation for them. When the question came from the audience it was in the question-answer segment after the task.

Eyebrow movements and facial expressions were minimal. This was basically because the distancing of speaker from audience did not allow these visual features to be of effect. Such features were appropriate in the informal situations but not in the formal ones. There was a notable exception. At times two audience members would turn to each other and raise eyebrows in a knowing manner or make some type of facial expression denoting derision, disbelief, etc. This intimate type of nonlinguistic communication took place within an overall formal situation.

Eye contact with audience members was often broken. Speakers would look down to their notes, look up to the ceiling when searching for an appropriate word, or look at the objects about which they were speaking. Only one speaker felt comfortable making sustained audience eye contact.

Gestures were likewise used sparingly, and this included gestures of all types. Instead of gesturing to signify objects the speaker had the objects there, so that hand and arm movements were used only to display objects. C. had model rocket components while M. had books on dogs and photos of dogs. Ba. had badminton birds. By., who had nothing, did not gesture at all. Gestures to suggest the movements and actions of people were not appropriate to the subject matter, and gestures to gain attention were not appropriate in this situation except in the question-answer segment. In this segment audience members would raise hands and await their turn, their turn being signalled by the speaker, who would say the person's name, or look to him and nod his head saying "yes," intoned as a question.

Torso gestures were minimal, being used only to step from behind the desk when displaying an object or picture, or when turning to an audience member to address his question. The subcategories of Laughter and Grinning were minimal. Laughter itself was not a feature to appear at all, while smiling and grinning were used sparsely by the speakers. When used by audience members it was in the intimate total meaning manner as previously described.

In the formal situation the conveyance of meaning rested almost exclusively on the linguistic utterances. This is why such features as voice quality, intonation patterns, stress, timbre, and the physical qualities and personal appearance of the speaker are of such importance.

Individual Differences in the Use of Nonlinguistic Features

Personality characteristics and behavioural traits might well be of greater interest than differences between task situations in a discussion of the use of nonlinguistic features of communication. Most people are aware that certain persons are very effective orators and speakers. "Orators" is used here because the term suggests the persuasive quality of a speaker, while a "speaker" might be considered as one who addresses an audience, regardless of his effectiveness in doing so. Likewise some people are competent social speakers, while others are accomplished public speakers. Some are comfortable in casual situations, others appear at ease in formal situations. There are a few people who seem to be able to adapt linguistically to all of the abovementioned situations.

The investigator believes that the same can be said for children at the grade six level, though in general children at this level are quite at ease in the casual situation among their peers, in other informal situations with close friends and family members, but not so in the formal situation. Some children obviously display leadership qualities, and these qualities are very much linked with their use of language. Dominant children in group settings are allowed to speak more, are expected to speak and to lead conversation, and are attended to by all others in the group.

In this section the individual characteristics of the four key subjects are described, not necessarily by each task situation but rather across all situations. Use of nonlinguistic features, and idiosyncracies of such use, appear in all situations, which adds strength to the argument that they are closely allied with personality traits.

a. M.

M. is a mature girl who is respected by her peers. She is an adroit speaker in all situations, and was definitely the most impressive of the four in the formal situation. In the informal situations she maintained eye contact to a high degree and used eyebrow movements, head movements and facial expressions to provide feedback as well as to convey total meaning. Gestures to signify objects were prevalent, but to suggest the movements and actions of people she would use eye contact and head movements rather than hand or arm gestures.

She was not an excitable type of person and so gestures to gain attention were not a regular feature. She would usually wait for the natural termination of an utterance to speak rather than interrupt the speaker. In the formal situation she would cover the whole audience visually, and would address the entire audience through eye contact. She used pictures and personal anecdotes to illustrate her talk. In the question-answer segment M. addressed each speaker by name, thus infusing a degree of personableness into the situation.

M. was a leader and respected as such by her peers, particularly the girls. She did not dominate discourse in the casual and consultative situations, and was not deferred to in these situations. In the intimate situation she was not the dominant member, and she was able to use humour naturally and without affectation of attention.

b. Ba.

Ba. was a much quieter and a more nervous girl than was M., with whom she was a very close friend. In the intimate situation she was at ease and animated, and in terms of overall expressiveness she was dominant. But in the casual and particularly in the consultative situation she became passive and subdominant, deferring to other speakers. Ba., who used more gestures than M. to convey meaning, was more expressive with hand and arm gestures. M. focused instead on linguistic constructions. Ba. spoke very rapidly and often her utterances became tangled, so that rapid gestures would often be used to complete the intended meaning.

She would use gestures to gain attention, but eye contact was a seldom-used feature. Even in the intimate situation Ba. would very often be looking elsewhere when speaking. In the casual and consultative situations she would follow speakers by eye contact, and be in contact visually with them when she interrupted or voiced a statement.

In the formal situation Ba. was a bland and quite uninteresting speaker. She virtually read from a prepared text, despite being advised against doing so, and thus her head and eyes were downwards as she read. Facial expressiveness is best described as being blank, and humour was lacking both nonlinguistically (smiling) and linguistically. This was true in all situations except the intimate. Ba. seems to be a serious person as characterized by bland facial expressions and nonuse of humour.

Ba. engaged in nonfunctional, nonlinguistic features on a number of occasions. These were nervous actions and appeared in all situations. Such features were not used as thinking pauses or discourse fillers, as is the wont of some speakers, particularly in formal situations.

c. C.

C. is definitely considered a leader by all the children in the first three task situations. This is especially so among the boys who in most cases defer to him. Where a boy group member disagrees with him C. becomes critical or derisive of that person. In this sense he is not only dominant but repressive of the group situation.

C. usually uses humour effectively to assert his leadership position and his popularity. Only in the intimate situation is he somewhat subdued and less overtly dominant, but he has control, nevertheless, over the subject matter, while the topics maintained are those of his special interest. To gain attention in a group situation C. tends to interject rather than use gestures. He is also effective at using torso movements to gain attention; for example, he leans back in his seat in a manner that draws attention and deference.

C. maintains eye contact for brief periods only, such as for one or two words. He will look ahead, down at the table, up towards the ceiling, or away to the side. Mostly he looks ahead, or his eyes wander over the person of By., but not making eye contact with By. In the formal situation he makes brief visual contacts with the audience but mostly he is looking at the assembled rocket parts he has for display.

C. is very seldom still and is always moving his fingers or hands, or shifting his body on the seat, and leaning backwards or forwards. This is not nervous action in the sense that it results from social discomfort, but rather from restlessness. He is particularly restless when others are speaking and he hasn't spoken for a minute or more. His almost constant movements do tend to focus the attention of other group members on him.

C. tends to raise his eyebrows to give emphasis and to indicate his own personal attitudes and feelings. C. makes much use of eyebrow movements and facial expressions. He doesn't laugh overtly, but snickers in an overt manner, which can easily be interpreted derisively. In the formal situation he smiled extensively in order to elicit humour, but the audience did not respond.

d. By.

By. is quiet and somewhat shy, particularly in the larger group situations. He is most at ease in the intimate situation and least in the formal situation. Even in the intimate situation he is subdominant to C. and defers to him, especially in the casual and consultative situations. By. maintains almost constant eye contact, and establishes eye contact with the speaker. He usually sits with folded arms in all situations and, in general, is very still.

Gestures are minimal, even those to gain attention. By. will wait for a natural termination of discourse before making his contribution. Nonfunctional features are virtually nonexistent, because By. is a quiet rather than a nervous or restless boy. He looks ahead only when self-conscious or in thought. Torso movements such as shrugging of the shoulders is a common feature, used to express total meaning.

Even in the formal situation By. maintained eye contact throughout. His eyes roved to most members of the audience. Being uncomfortable in the formal situation was signalled by his visibly inhaling and exhaling deeply. In the question-answer segment he made eye contact with individual members and with an upwardly-inflected "yes" bade each to ask his question.

PART B: QUANTITATIVE-DESCRIPTIVE ANALYSES

Since the purpose of the study is to describe various methods of analyzing the speech styles in children's oral language, it is essential to look at differences, and the magnitude of differences between analyses, the task situations, and, at times, individual children. Through discussion of differences, hypotheses for further research can be suggested.

The limited number of subjects and the nature of the data upon which the analyses to follow are based, do not lend themselves to rigorous statistical analyses. Therefore the investigator must decide what will determine the true and meaningful differences in magnitude. Sequences, patterns and trends in the data will at times form the basis for analytical discussion. Use will be made of meaningful differences, sequences, patterns and trends in order to suggest hypotheses for further study, rather than to draw firm conclusions from the data.

DISTINGUISHING VOCABULARY ITEMS

a. Lexical Diversity: Type-Token Ratio

The type-token ratio is a measure of lexical diversity and is one useful way of distinguishing vocabulary usage in different task situations. Since the ratio looks at all lexical items in 100-word units, this measure does not single out lexical items, and lexical uniqueness cannot be assessed. One aspect of lexical uniqueness forms the second part of lexical analysis and follows the present discussion. The type-token ratio has been successfully used in differentiating between spoken language samples (Fairbanks, 1944), in analyzing differences between spoken and written expression (Horowitz and Newman, 1964), and in the comparative investigation of casual and careful language styles of average and superior fifth grade children (Jensen, 1973).

The data, in the form of type-token ratios, are given in Table 5. Similar results to those in the Jensen (1973) study can be found from examination of the ratios in Table 5. Jensen found that the casual language style was characterized by a considerably more diversified choice of words than was the careful style, and the difference was statistically significant. It must be kept in mind that the casual language style of Jensen is not necessarily equivalent with the

Table 5

TYPE-TOKEN RATIO SCORES FOR KEY SUBJECTS IN EACH TASK SITUATION:
UNIT SCORES AND MEANS

	Task 1					Task 2					Task 3					Task 4									
																Talk Segment					Question-Answer Segment				
	Unit					Unit					Unit					Unit					Unit				
Subject	1	2	3	4	Mean	1	2	3	4	Mean	1	2	3	4	Mean	1	2	3	4	Mean	1	2	3	4	Mean
M.	.55	.59	.66	.61	.60	.67	.65	.77	.60	.67	.61	.66	.58	.60	.61	.64	.57	.65	.70	.64	.68	.69	.69	.62	.67
Ba.	.67	.70	.56	.63	.64	.68	.68	.75	.59	.68	.56	--	--	--	.56	.62	.65	.73	--	.67	.65	.70	--	--	.68
C.	.71	.66	.77	.63	.69	.60	.67	.69	.68	.66	.68	.71	.69	.71	.70	.67	.65	.65	--	.65	.71	.61	--	--	.66
By.	.68	.67	.78	.71	.71	.69	.59	.65	.75	.67	.80	--	--	--	.80	.72	.71	--	--	.72	.57	.77	--	--	.67

casual task situation of this study. Jensen used two broad language styles, casual and careful, while this investigator employed four specific task situations, casual being one.

The means in Table 6 were computed from all unit scores, and are not means of individual subject means from Table 5. An inspection only of Table 6 means of pooled type-token ratio (TTR) unit scores can lead to a conclusion of no differences between task situations. Such a judgment would be misleading. The similarities of combined group means might well result from statistical regression towards a general TTR mean in this study.

An inspection of group means in Table 6 can provide another interpretation. Group 2 (boy dyad), on the whole, shows a higher TTR mean, especially in the intimate and consultative situations. Rather than a specific sex difference, the Task 1 difference might be explained by the subject matter choice of the two groups. The girls (Group 1) chose to discuss general social events in and out of school. The boys chose particular hobbies and interests where information and facts were prominent. The tendency towards greater subject matter specificity might also explain the higher TTR mean for the boys' group for Task 3. Subject maintenance was a more pronounced feature of Group 2 than Group 1 in the consultative situation.

A breakdown of the type-token ratio scores is given in Table 5, and there are particular points of interest between task situations and between the individual key subjects. For both of the girls the means are greater in Task 2 than in Task 1. This is accompanied by a shift in subject matter from the general topics of a social nature

Table 6

MEANS OF COMBINED TYPE-TOKEN RATIO SCORES FOR EACH TASK SITUATION BY GROUP AND BY COMBINED GROUPS

				Task 4		
	Task 1	Task 2	Task 3	Talk Segment	Question-Answer Segment	Combined Segments
Group 1 Girl Dyad	.62	.67	.60	.65	.67	.66
Group 2 Boy Dyad	.70	.67	.72	.68	.67	.67
Combined Groups	.66	.67	.66	.66	.67	.67

to more specific topics such as television, movies, and particular events. The boys tended to talk about the same topics in both situations.

In the consultative situation (Task 3) the means in two instances decline from Task 2 and approximate in two instances the Task 1 means. Two means are considerably different; Ba's is much lower, and By's much higher, but these two means are not in fact means but the scores obtained from one partial TTR unit. Consequently they are not as reliable as the means obtained for the other key subjects. The lower TTR means in Task 3 can likely be explained by the nature of the task situation. In the consultative situation, with a diverse group of children including relative strangers, there needs to be a degree of repetition of information, because there is a lesser background of shared experiences than in less formal situations. Also, at times speakers are interrupted, and to make their statements clear, or to emphasize points and opinions, they will repeat phrases and key words.

In Task 4 the TTR means were computed for both the talk (monologue) segments and the question-answer segments which followed each individual presentation. The difference between the means for each key subject is considered major only in the case of By. By. answered questions as tersely as he possibly could, in keeping with his tendency to reticence. Consequently he would answer with a "yes" or "no" whenever he could, and would only be expansive when further questioned.

Combined means for Task 4 for individual subjects are:

M. = .64

Ba. = .67

C. = .64

By. = .69

These means are very close to the means for Task 2, which were found to be higher than the means for Tasks 1 and 3 for the girls but not for the boys. The formal task situation, with its longer utterances and monologue predominance, produced TTR means which were no higher than those for the casual situation, and in some cases lower than Task 1 and 3 means for boys. This is partially explainable by the need for careful description in the formal situation, and the degree of repetitiveness that goes with careful description in a linguistic situation where shared background information is minimal.

Summary

The results of this analysis of TTR supports in part the findings reported by Jensen (1973). As measured by the type-token ratio, there was, in general, greater lexical diversity in the casual situation and in the formal situation, but there tended to be lesser lexical diversity in the intimate situation and in the consultative situation. When explaining these differences it is necessary to look at group composition (girls and boys) and the types of subject matter chosen by group members. Experiential background factors are also worthy of consideration in accounting for differential lexical diversity between task situations.

b. Contractions, Compactions and Truncations

A study of the contractions, compactions and truncations used by key subjects provides a measure of lexical uniqueness of these items in the different task situations which is one aspect of distinguishing vocabulary items. Although formally defined in Chapter 4, the words that make up these data will be briefly reviewed. Contractions are made up of the usual contracted forms such as "couldn't," "can't," "don't," "weren't," "he's," etc. plus lesser-used varieties such as "picture's" for "picture is," "what'd," "they'd," etc. Compactions are made up of two words compacted into one in a colloquial type of usage, for example, "wanna," "gonna," "gotta." Truncations result from the deletion or substitution of initial, medial or final sounds, for example, substituting the final "in" for "ing" (laughin'), also "an'," "'em," "prob'ly." Truncations are also known as reduced forms.

Tables 7 to 14 which follow allow a comparison of the different lexical features across task situations. In order to place in perspective their use in the transcripts, ratios of occurrence in relation to the lexical word count are given. The lexical word count is the count of all words which form parts of C-units, from which extraneous linguistic material is omitted. The tables show frequencies, types, and ratios of types to frequency and frequency to lexical word count for each key subject in each task situation, then for groups (girls, boys), and finally for all subjects pooled.

The only example of analysis of abbreviated language forms, located by the investigator, was that carried out by Rainey et al.

Table 7

LEXICAL WORD COUNT FOR EACH KEY SUBJECT IN EACH TASK SITUATION

Subject	Task 1	Task 2	Task 3	Task 4	Total
M.	953	494	509	913	2,869
Ba.	1,973	450	95	507	3,025
C.	1,115	1,053	1,006	466	3,640
By.	1,186	573	70	397	2,226
Total	5,227	2,570	1,680	2,283	11,760

Table 8

FREQUENCY COUNTS, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR TASK 1

	Contractions				Compactions				Truncations			
Subject	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
M.	27	13	0.48	.028	0	0	0.00	.000	11	9	0.82	.012
Ba.	54	24	0.44	.027	0	0	0.00	.000	28	21	0.75	.014
C.	47	23	0.49	.042	11	3	0.27	.010	9	7	0.78	.008
By.	45	26	0.58	.038	5	2	0.40	.004	18	10	0.56	.015

* LWC = Lexical Word Count

Table 9

FREQUENCY COUNTS, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR TASK 2

	Contractions				Compactions				Truncations			
Subject	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
M.	8	7	0.88	.016	0	0	0.00	.000	6	4	0.67	.012
Ba.	17	11	0.65	.038	0	0	0.00	.000	3	2	0.67	.007
C.	48	23	0.48	.046	3	3	1.00	.003	24	11	0.46	.023
By.	33	18	0.55	.058	3	3	1.00	.005	9	5	0.56	.016

* LWC = Lexical Word Count

Table 10

FREQUENCY COUNTS, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR TASK 3

	Contractions				Compactions				Truncations			
Subject	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
M.	20	8	0.40	.039	0	0	0.00	.000	4	4	1.00	.008
Ba.	1	1	1.00	.011	0	0	0.00	.000	0	0	0.00	.000
C.	57	25	0.44	.057	10	2	0.20	.010	13	10	0.77	.013
By.	2	1	0.50	.314	1	1	1.00	.014	0	0	0.00	.00

* LWC = Lexical Word Count

Table 11

FREQUENCY COUNTS, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR TASK 4

Subject	Contractions				Compactions				Truncations			
	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
M.	31	13	0.42	.034	0	0	0.00	.000	0	0	0.00	.000
Ba.	21	8	0.38	.041	0	0	0.00	.000	2	2	1.00	.004
C.	32	13	0.41	.069	0	0	0.00	.000	14	5	0.36	.030
By.	34	16	0.47	.086	0	0	0.00	.000	9	5	0.56	.023

* LWC = Lexical Word Count

Table 12

POOLED FREQUENCIES, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR GROUP 1 (GIRLS) PER TASK SITUATION

	Contractions				Compactions				Truncations			
	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
Task 1	81	37	0.46	.028	0	0	0.00	.000	39	30	0.77	.013
Task 2	25	18	0.72	.026	0	0	0.00	.000	9	6	0.67	.009
Task 3	21	9	0.43	.035	0	0	0.00	.000	4	4	1.00	.007
Task 4	52	21	0.40	.037	0	0	0.00	.000	2	2	1.00	.001

* LWC = Lexical Word Count

Table 13

POOLED FREQUENCIES, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR GROUP 2 (BOYS) PER TASK SITUATION

	Contractions				Compactions				Truncations			
	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
Task 1	92	49	0.53	.040	16	5	0.31	.007	27	17	0.63	.012
Task 2	81	41	0.51	.050	6	6	1.00	.004	33	16	0.48	.020
Task 3	59	26	0.44	.055	11	3	0.27	.010	13	10	0.77	.012
Task 4	66	29	0.44	.076	0	0	0.00	.000	23	10	0.43	.027

* LWC = Lexical Word Count

Table 14

POOLED FREQUENCIES, TYPES AND RATIOS OF CONTRACTIONS, COMPACTIONS AND TRUNCATIONS FOR ALL KEY SUBJECTS PER TASK SITUATION

	Contractions				Compactions				Truncations			
	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*	Total Number	Number of Types	Ratio Types/ Total	Ratio Total/ LWC*
Task 1	173	86	0.50	.033	16	5	0.31	.003	66	47	0.71	.013
Task 2	106	59	0.56	.041	6	6	1.00	.002	42	22	0.52	.016
Task 3	80	35	0.44	.048	11	3	0.27	.006	17	14	0.82	.010
Task 4	118	50	0.42	.052	0	0	0.00	.000	23	10	0.43	.010

* LWC = Lexical Word Count

(1969). They looked at the style switching of a teacher's speech in a Head Start class. Speech was examined for contrasting pairs (for example, "you" and "ya") and formal and informal features were assigned. It was found that the teacher adopted speech with a larger number of informal features when she wanted to draw closer to the pupils, while her speech contained a greater frequency of formal features when she was maintaining a greater distance.

This discussion begins with a look at the pooled data presented in the last table of the series, Table 14. In this table the measure of most interest is the ratio which shows the total number (of contractions, compactions or truncations) to the lexical word count. The Total/LWC ratio column for contractions shows an increase from one task situation to the other, with the intimate situation having the lowest ratio and the formal situation having the highest ratio. An increase in the Total/LWC ratio suggests that relatively more contractions are being used in more formal situations. Superficially this might suggest that the use of contractions signals language formality, but there are other explanations. First, contractions are acceptable language shortcuts, and most are no longer considered as shortcuts but as standard language items. Moreover, the full linguistic form of "isn't" or "can't" could be considered to be pedantic and affected usage in any but the most formal situation. This investigator considers that the use of more contractions in more formal situations may actually signal more careful language use, that is, language appropriate to the situation.

This statement is supported by the Types/Total ratios for contractions in Table 14. In Tasks 3 and 4 the ratios are lower than are the ratios in the less formal Tasks 1 and 2, suggesting that a lesser variety of contractions was being used. The same standard contractions were being used several times, while there was decreased tendency toward the use of certain colloquial contractions such as "this'd" and "ain't."

The increased use of contractions was associated with decreased use of compactions and truncations as the degree of formality increased. It is the investigator's opinion that compactions and truncations represent less acceptable use of language, and this is certainly true in more formal situations. While such use of language is tolerated and used without question in informal situations such usage in formal situations would be unacceptable.

It would seem that the children in the study recognize these fine degrees of use. The ratio of Total/Lexical Word Count for compactions in Table 14 is lower in Tasks 1 and 2 than in Task 3, while in Task 4 it is zero. In the formal situation the children might well have thought it appropriate to drop the use of compactions, these being the least acceptable of the three lexical types. The larger Task 3 ratio may be attributable to a sex difference and will be discussed later. The Total/Lexical Word Count ratio for truncations shows the smallest figures for the two more formal situations.

The pooled data for contractions, compactions and truncations by group (girls, boys) are presented in Tables 12 and 13. There are some interesting differences, but distortions can result when data are pooled from a small number of different (that is, not homogenous) subjects. The ratio of Total/Lexical Word Count provides the most useful data for discussion.

An increase from Task 2 to 4 in the ratio of contractions for Group 1 (girls) is evident in the data (Table 12), suggesting that the use of contractions might increase as the level of formality moves from informal to formal. This same tendency in the use of contractions is true to a greater extent for Group 2 (boys); there is a more distinct difference between Tasks 1 to 4 for the same ratio of Total/Lexical Word Count in Table 13. With the boys this increase is associated with a decrease in the Types/Total ratio, which suggests a tendency towards fewer types of contractions, and fewer to zero colloquial forms.

The ratios for compactions provide interesting discussion. The girls (Table 12) used no compactions at all in any of the task situations, while the boys (Table 13) only dropped such use in the formal situation. For boys the highest ratio is of Total/Lexical Word Count in Task 3, and this phenomenon will be explained when the tables for individual subjects are discussed. In Tasks 1, 2 and 4, for the boys the tendency is towards a decline in the use of compactions as the level of formality increases. It could be hypothesized that the Task 3 ratio would normally reflect this same tendency.

The ratios of Total/Lexical Word Count for truncations show a decline with Group 1 as the level of formality increases. The girls in this study used fewer truncations when a more formal style of language was considered appropriate. This finding is in keeping with the acceptability of phonological correctness and attention in different situations. The boys paid less heed to this principle of acceptability, and the ratios for truncations in Group 2 suggest no particular trend. It is difficult to explain why the Total/Lexical Word Count ratio for boys in Task 4 is highest since both boys had high individual ratios (Table 11). Probably it is the outcome of both boys having been nervous and uncomfortable in the formal situation. Both tried to inject some informality in the hope of making the situation more comfortable for themselves. Earlier in the chapter reference was made to the formal situation when each boy appealed to the other for feedback during their respective formal talks.

Examination of Tables 8, 9, 10 and 11 reveals individual differences in the use of contractions, compactions and truncations across task situations. Once again the ratio of total use to lexical word count is the basic one for discussion. Beginning with M., no pattern is evident in the use of contractions, except that use is highest in the formal situations (Tasks 3 and 4) and lowest in the informal situations. Compactions were not used at all. There was a decline in the use of truncations from a ratio of .012 in Task 1 to zero in Task 4. Thus the use displayed by M. is very similar to that of the pooled use previously reported.

Ba. showed an increase in use of contractions with more formal situations except in Task 3 where a strikingly low ratio was recorded. In task 3 because Ba. was reticent to the point of speaking only 95 words, the language sample is very restrictive by virtue of its size. As for M., there was no use of compactions in any task situation. The truncations ratios show a decline in use across more formal task situations, with the exception again of Task 3, where the zero figure is probably the result of the very small sample.

The ratios for contractions show that C. used more contractions with each task situation becoming more formal. The increase between Tasks 2 and 3, and 3 and 4, is substantial. It would seem as though C. equated the use of standardized contractions with linguistic formality. This is further suggested by the steady decrease across task situations of the Types/Total ratio, which shows that fewer types are being used, with fewer or zero colloquial types, in more formal situations. The ratios for compactions show no distinct trend except that C. chose not to use any compacted words in the formal situation. No pattern for the use of truncations is discernible because the largest ratio is for Task 4, the second largest for Task 2. Examination of the basic data shows that one truncation accounted for eight of the 14 occurrences in Task 4, the word being "ya" for "you." Careless pronunciation of the word might well explain the high incidence in the formal situation. Likewise in Task 2, the Types/Total ratio is low, with four words accounting for 17 of the 24 occurrences.

The ratio of total occurrences to lexical word count for the contractions used by By. shows the same trend as for the other three subjects. There was increased use with more formal situations, except for the Task 3 situation. The idiosyncratic Task 3 ratio might well be explained by By's reticence, as it was for Ba. in this same consultative situation. By. used a total of only 70 words, giving an unreliable language sample. It could be hypothesized that, given a reliable sample, the ratio could be expected to follow the pattern established by the other subjects.

In By's use of compactions there appears to be an increase across tasks, except that none occur in Task 4. The difference of .001 between Tasks 1 and 2 is too small to suggest a trend across tasks. The use of truncations is also non-systematic. Their greatest use in Task 4 may be explained by inarticulate speech due to nervousness. For example, By. definitely felt uncomfortable in the formal situation.

Summary

A trend is evident with the use of contractions. The children in this study used more contractions in more formal situations. They also tended to use fewer types of contractions, and to use the same ones a greater number of times. The children may recognize that contractions are an acceptable use of language, and because they are acceptable are considered appropriate in formal situations. Compactions and truncations are probably regarded by the children as much less acceptable. Although the children retain abbreviated language forms in all situations of formality, what they may be doing is substituting unacceptable compactions and truncations for acceptable contractions in more formal situations.

The girls seem to be more aware of the need to match acceptable vocabulary forms with situations than do the boys. However, the boys do use fewer or zero colloquial contractions in more formal situations than informal situations, though these forms are prevalent in the informal situations. Their intuition of appropriateness seems to be evident at this level.

c. Colloquial and Standard Forms of "Yes"

Along the lines of examination of contrasting pairs, from the study of Rainey et al. (1969), the investigator decided to contrast and compare the use of two forms of "yes." The two forms have been classified as Colloquial and Standard. The Colloquial form includes all occurrences of "yeah," "yea" and "yep." The Standard form is "yes." An analysis of these forms gives another approach to the study of distinguishing vocabulary items.

Frequency counts were made of both forms for each key subject in each task situation. Each frequency count was also shown as a ratio of frequency to lexical word count, which gave a reliable and comparative measure of its relative use in task situations. Table 15 gives these frequencies and ratios. The discussion which follows is visualized in the two graphs which make up Figures 8 and 9.

With all but one of the subjects (Ba.) the use of the colloquial form decreased from Task 1 to 2 and from 3 to 4, with an overall decrease across task situations with the increase in level of formality. The only subject whose decline in use is readily apparent is M. With the other three subjects there was an increase in use in Task 3, and this increase was a substantial one in the cases of Ba. and By. This increase might be related to the nature of the subject matter and the function that language was fulfilling, that of planning. The Task 3 situation provided a high degree of agreement and disagreement, which was evidenced in the use of "yes" and "no" forms. The fact that the colloquial "yes" forms predominated over the standard form might have been a function of the degree of emotional charge in the situation.

Table 15

FREQUENCIES AND RATIOS OF COLLOQUIAL AND STANDARD FORMS OF "YES" FOR EACH KEY SUBJECT PER TASK SITUATION

	Task 1				Task 2				Task 3				Task 4			
Subject	Colloquial Form	Ratio	Standard Form	Ratio	Colloquial Form	Ratio	Standard Form	Ratio	Colloquial Form	Ratio	Standard Form	Ratio	Colloquial Form	Ratio	Standard Form	Ratio
M.	44	.046	1	.001	22	.045	0	.000	14	.028	0	.000	0	.000	2	.002
Ba.	48	.024	0	.000	26	.058	0	.000	9	.095	0	.000	1	.002	2	.004
C.	35	.031	0	.000	27	.026	0	.000	31	.031	0	.000	0	.000	0	.000
By.	56	.047	1	.001	25	.044	1	.002	6	.086	0	.000	2	.005	10	.025

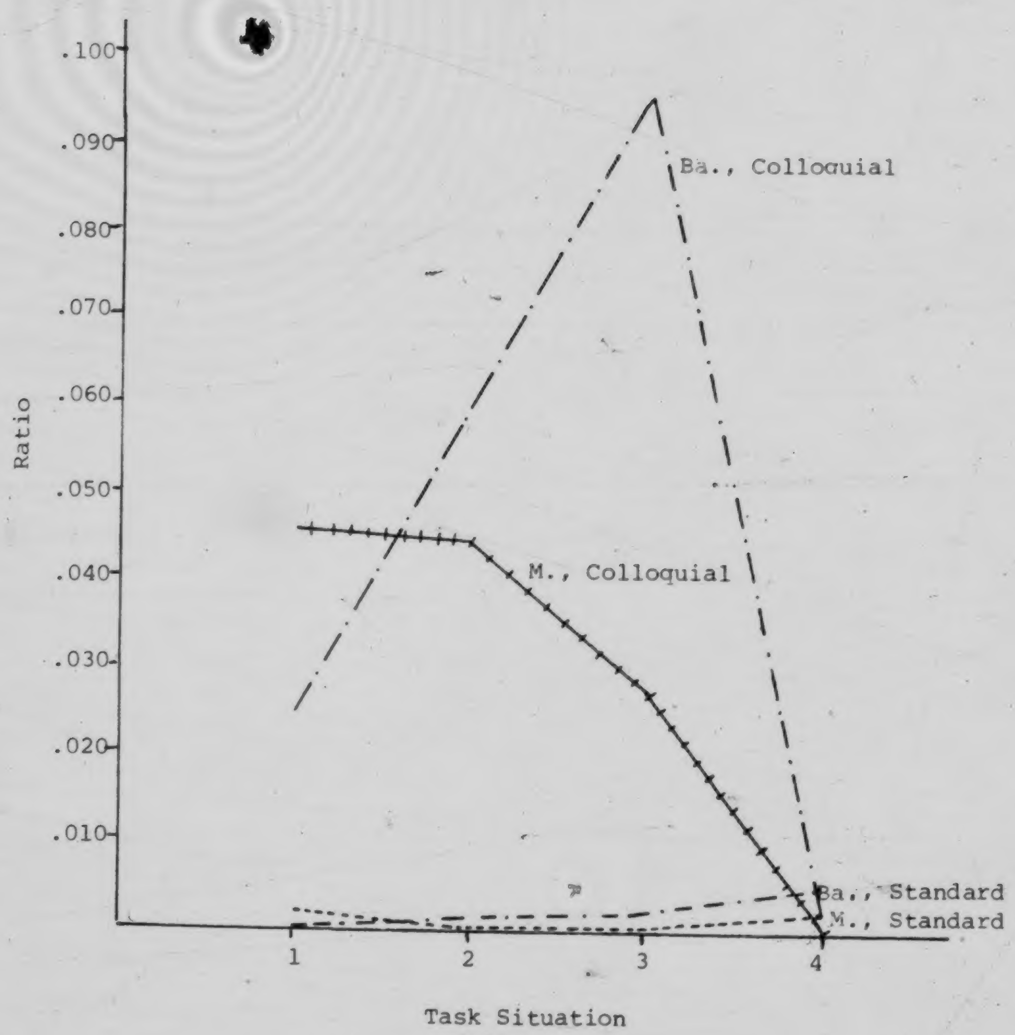


Figure 8

M. AND Ba.: USE OF COLLOQUIAL AND STANDARD FORMS OF "YES" ACROSS TASK SITUATIONS

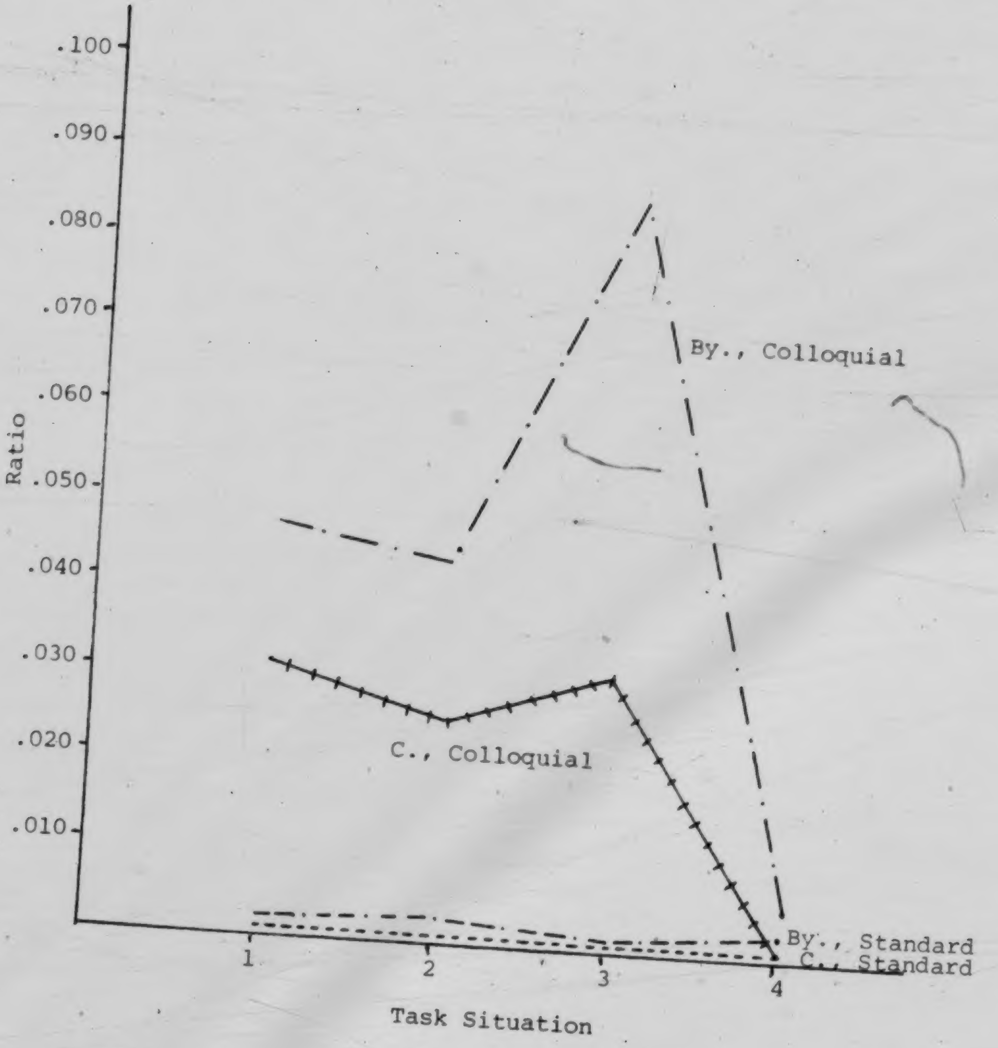


Figure 9

C. AND By.: USE OF COLLOQUIAL AND STANDARD FORMS OF "YES" ACROSS TASK SITUATIONS

It could by hypothesized that excitement results in the use of more colloquial language even in situations where normally it would not be appropriate.

The use of the standard form is as might be expected. It is hardly used, if at all, in the informal situations, but all subjects except C. showed an increase in use from Task 3 to 4. C. never used the standard form in any task situation, and in the formal situation he avoided the colloquial form altogether. The minimal to nil use of the standard form suggests that for these children the standard form in most situations is the informal form, what this investigator has called the colloquial form. The children seemed to naturally use the less formal forms in all situations except the formal, where "yes" was considered the appropriate form.

There are other contrasting pairs which can be compared, but the problem is to find their occurrence in a variety of task situations by the same speaker. The use of certain informal forms that do not form contrasting pairs, such as "okay," "good," "right," etc. can also be considered. These three words were also counted for each key subject in each task situation, and the trend was clearly one where there was greater use in the informal situations, decreasing to little or no use in the most formal situation. This trend was more pronounced with the girls than with the boys.

LEXICAL DENSITY

Ure (1969, 1971) found that lexical density was a valuable register differentiation measure. Halliday (1974, p. 32) describes lexical density as the proportion of content words to words as a whole in a text. This definition of lexical density, also used by Ure, is applied in this study. Halliday postulates that in general written language is more highly lexicalized than spoken language; it has a greater density. But register, being part of the speaker's communicative competence, results in his knowing how to distribute lexical items in a text according to different kinds of language use.

Density of lexical content is largely determined by the mode of discourse, with lexical density being only one of the features of discourse attributed to mode. The lexical densities of the text of each key subject in each of the four task situations were computed. Comparisons were then made across task situations to determine if lexical density was indeed a distinguishing measure of the language used by these same children in different settings. The lexical word count and the lexical content word count were the two frequency counts used in computing the lexical densities. The lexical density ratios (of lexical content words to all words) appear in the first column of Table 18, and the present discussion deals with the ratios in that column.

The pooled frequencies, in the first row of Table 18, show an increase in lexical density from the casual to the formal situation. The largest differences appear between Tasks 1 and 2, and 3 and 4. This same trend was evident in the ratios for Ba., while C. and By. showed the same trend except for one ratio which was discrepant in the rate of progression. With M. the formal situation is marked by a higher ratio than in any of the other three task situations.

Figure 10 shows the ratios graphically, including the ratio

Table 16

FREQUENCIES FOR TASKS AND KEY SUBJECTS OF LEXICAL CONTENT WORDS COUNT

Subject	Task 1	Task 2	Task 3	Task 4	Totals
M.	445	215	236	452	1,348
Ba.	822	192	41	283	1,338
C.	501	475	464	208	1,648
By.	529	295	32	189	1,045
Totals	2,297	1,177	773	1,132	5,379

Table 17

FREQUENCY COUNTS OF LEXICAL CONTENT WORDS FOR KEY SUBJECTS PER TASK SITUATION

Subject	Task	Nouns	Single Word Adjectivals	Verbs	Single Word Adverbials
M.	1	125	35	187	98
	2	72	31	87	25
	3	81	75	70	10
	4	159	100	147	46
Ba.	1	251	92	345	134
	2	70	30	79	13
	3	15	13	10	3
	4	127	62	71	23
C.	1	172	68	206	55
	2	150	66	200	59
	3	162	104	171	27
	4	70	28	99	11
By.	1	193	69	207	60
	2	97	58	117	23
	3	13	7	9	3
	4	65	39	66	19

Table 18

RATIOS FOR LEXICAL DENSITY AND LEXICAL CONTENT WORD ANALYSIS FOR KEY SUBJECTS PER TASK SITUATION

	Task	Lexical Density Ratio	Ratio Nouns to Lexical Content Words	Ratio Nouns to All Words	Ratio Adjectivals to Nouns	Ratio Verbs to Lexical Content Words	Ratio Verbs to All Words	Ratio Adverbials to Verbs
Pooled	1	.439	.323	.142	.356	.411	.181	.367
	2	.458	.331	.151	.476	.410	.188	.248
	3	.460	.351	.161	.734	.336	.155	.165
	4	.496	.372	.184	.544	.338	.168	.258
M.	1	.467	.281	.131	.280	.420	.196	.524
	2	.435	.335	.146	.431	.405	.176	.287
	3	.464	.343	.159	.926	.297	.138	.143
	4	.495	.352	.174	.629	.271	.161	.313
Ba.	1	.417	.305	.127	.367	.420	.175	.388
	2	.427	.365	.156	.429	.411	.176	.165
	3	.432	.366	.158	.867	.244	.105	.300
	4	.558	.449	.250	.488	.251	.140	.324
C.	1	.449	.343	.154	.395	.411	.185	.267
	2	.451	.316	.142	.440	.421	.190	.295
	3	.461	.349	.161	.642	.369	.170	.158
	4	.446	.337	.150	.400	.476	.212	.111
By.	1	.446	.365	.163	.358	.391	.176	.290
	2	.515	.329	.169	.598	.397	.204	.197
	3	.457	.406	.186	.538	.281	.129	.333
	4	.476	.344	.164	.600	.349	.166	.288

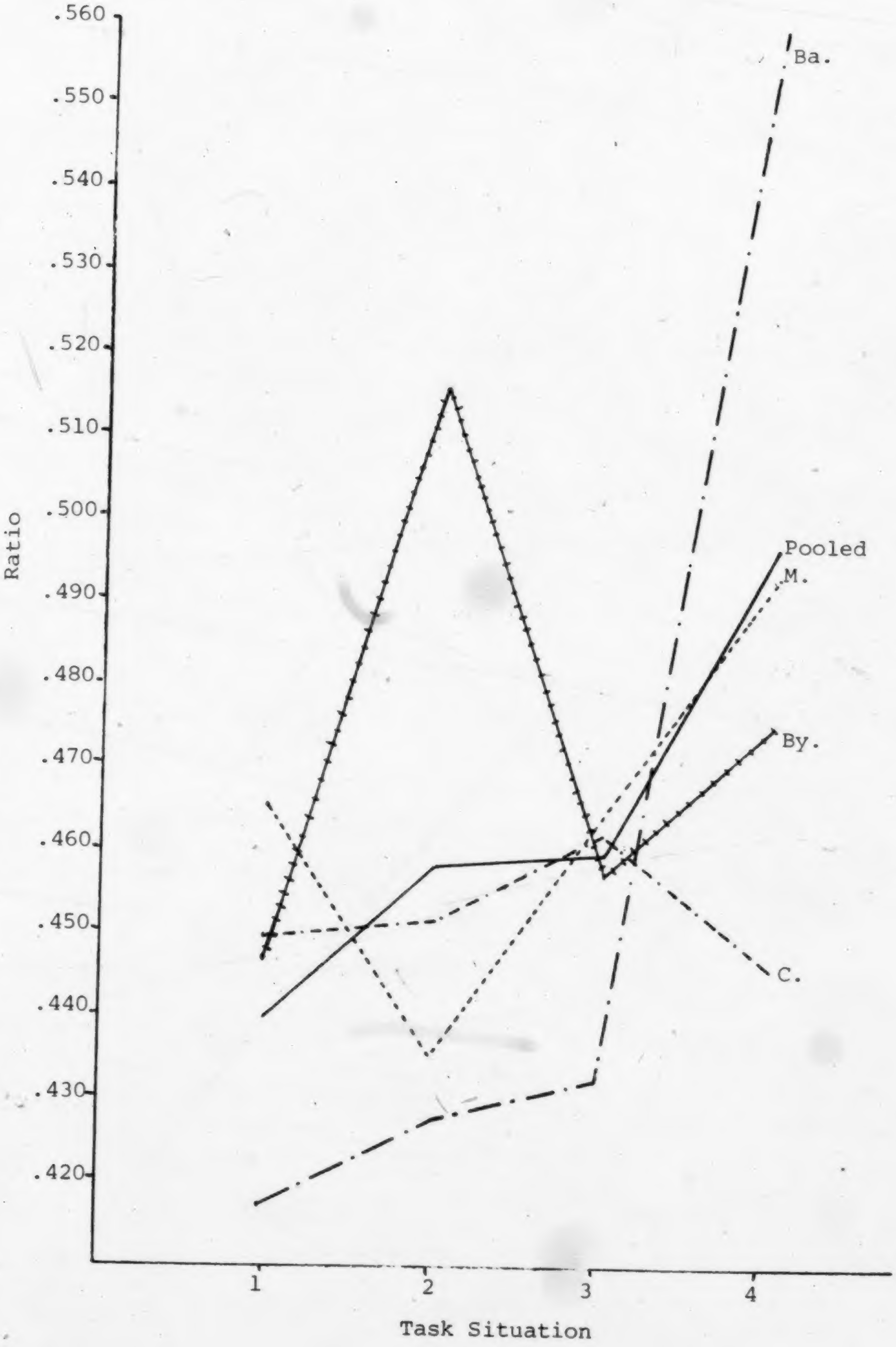


Figure 10

LEXICAL DENSITY RATIOS ACROSS TASK SITUATIONS FOR
INDIVIDUAL AND POOLED KEY SUBJECTS

computed from pooled frequencies. The increase in lexical density across task situations is obvious in the lines marked Pooled and Ba. The discrepant Task 2 ratio for By. and Task 4 ratio for C. are noticeable. Of much interest is the close range of ratios in Task 3. Given data for more subjects the .460 ratio might approximate a norm for the consultative situation. Except for one ratio, in each instance the ranges in the Task 1 and 2 situations are narrow, suggesting the possibility of norms being established with more data.

The measure of lexical density may be a useful one in distinguishing between levels of formality in children's oral language, but further study is required. The trend is towards a lower density of content words in informal situations and a higher density in formal situations. The findings in this study are in agreement with those of Ure, who found that lexical density was a valuable register differentiation measure. The results of this study also substantiate the theoretical construct postulated by Halliday where register, as part of a speaker's communicative competence, results in his knowing how to distribute lexical items in a text according to different kinds of language use.

Lexical Content Words Analysis

Although the lexical density measure proved useful it was decided by the investigator to deepen the analysis of content words by computing ratios which would show the relationship of nouns, adjectives, verbs and adverbs to all content words, to all words in a text, and to each other. These analyses yielded some useful information and showed directions for possible future types of lexical content analysis. All the ratios are given in Table 18. The ratios using lexical content words are based on the data provided in Tables 16 and 17. The ratios using all words are based on the lexical word count frequencies which appeared in Table 7 earlier in this chapter.

It should be noted that only the ratios which used nouns proved useful; none of the ratios using verbs resulted in any identification of pattern or trend. Consequently this discussion focuses on the ratios of nouns to lexical count words. To aid in the analysis of these ratios graphs were prepared, and Figures 11 and 12 present the data.

The ratios of nouns to lexical content words showed a consistent increase from one task situation to another as the level of formality went from informal to formal. The pooled ratios show this, and the ratios for M. and Ba. follow this same trend. It seems that as more lexical items are used in more formal situations, which the lexical density measure showed, then more nouns are also used.

The ratio range of nouns to lexical content words is narrow in the Task 4 situation, with the exception of Ba., and likewise the ratio ranges in the Task 3 and 2 situations are limited, with one exception each. This trend suggests that norms within these ranges could likely be expected in large samples. What appears from the data is that there are two patterns, one for the girls and one for the boys. The trend displayed by the ratios for the girls is consistent with those of the pooled frequencies, while both boys produced discrepant ratios, with the Task 3 figures highest and the Task 2 lowest. These two sex patterns might be explained by reference to the subject

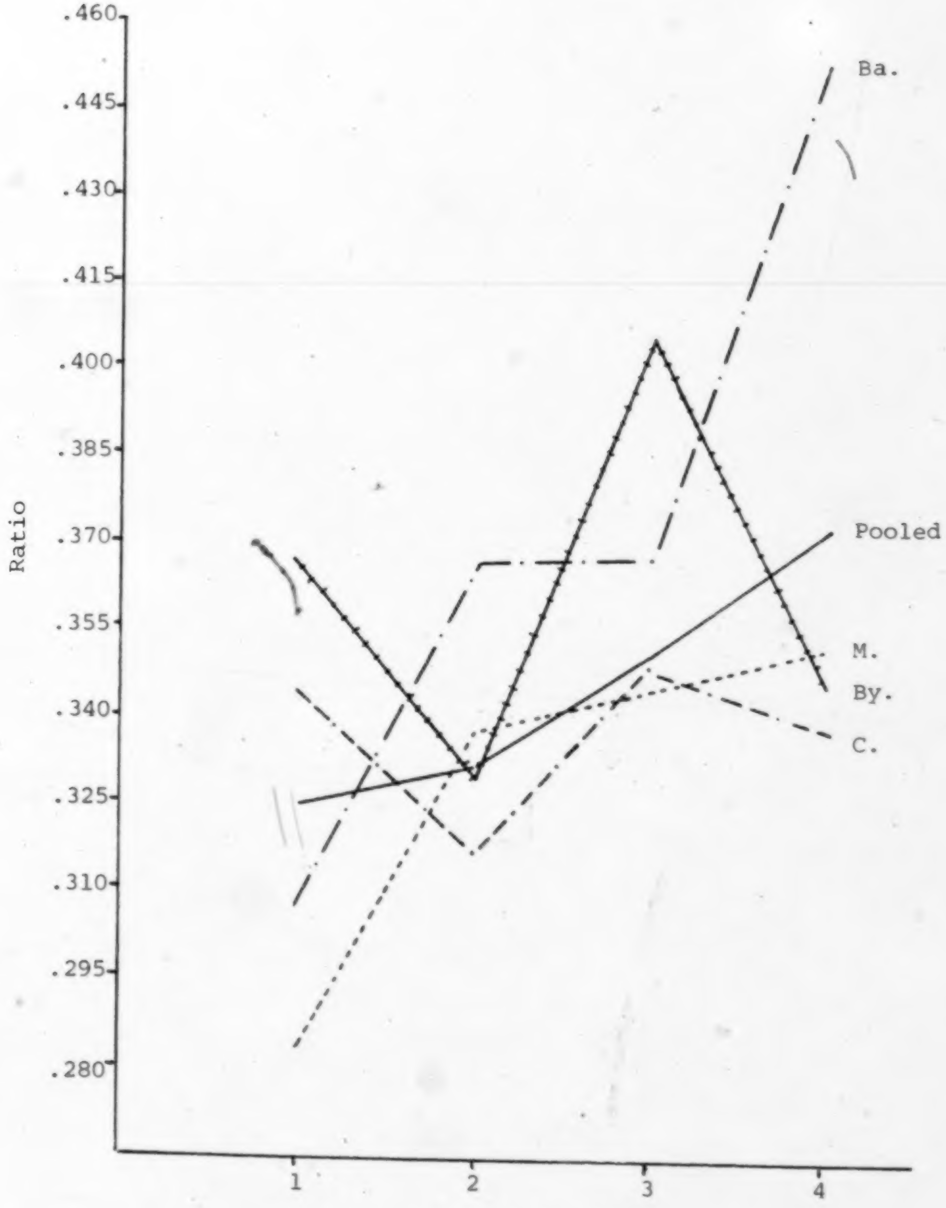


Figure 11

RATIO NOUNS TO LEXICAL CONTENT WORDS ACROSS TASK SITUATIONS FOR INDIVIDUAL AND POOLED KEY SUBJECTS

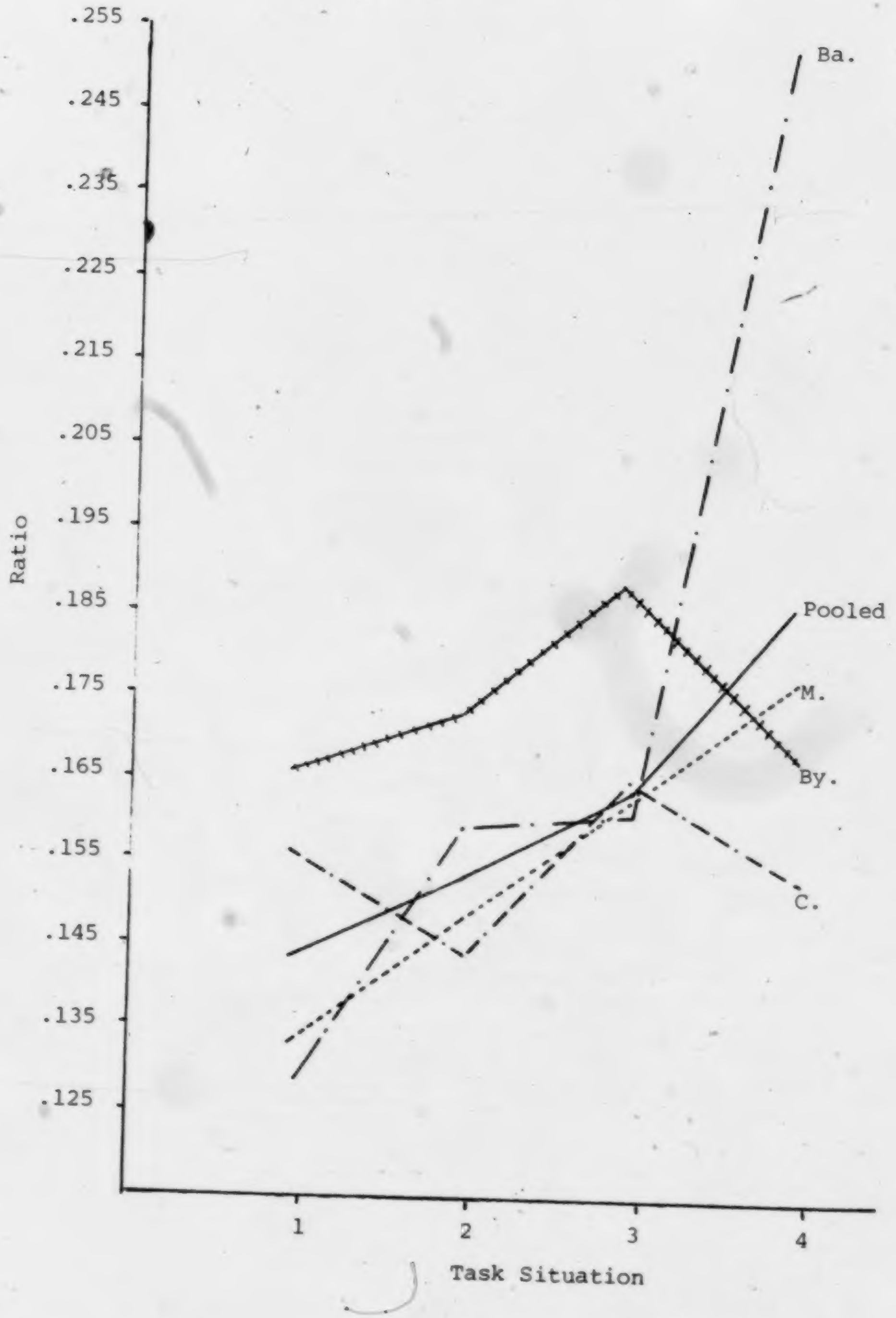


Figure 12

RATIO NOUNS TO ALL WORDS ACROSS TASK SITUATIONS
FOR INDIVIDUAL AND POOLED KEY SUBJECTS

matter which made up the various group discussions in each task situation. It will be recalled from previous discussion that the girls used a wider range of subject matter. The boys' tendency to informalize the formal situation, also previously noted, might have helped to produce the low Task 4 ratios.

Figure 12 shows the graphed ratios of nouns to all words (lexical word count). The pooled frequencies produced ratios that increase steadily from Task 1 through 4, from intimate to formal, with the largest difference between Tasks 3 and 4. This same trend is evident in the progression across tasks as shown in the ratios of M. and Ba. Once again the progression of ratios for the two boys was discrepant; their Task 4 ratios are low, the Task 3 ratios highest. Their attempts to informalize the uncomfortable (for them) formal situation are probably again reflected in these low ratios. The two sex patterns, as mentioned in the previous paragraph, are once more evident in these ratios.

After the findings for the nouns to lexical content words ratios similar findings might be expected for the ratios of nouns to all words, as did occur. But the ratio range for different task situations is narrower in the latter ratios, particularly for Task 3, with the one exception By. The grouping for Task 2 is again close, except for By., while the other tasks show groupings that are fairly restricted in dispersion. Further research might well investigate the possibility of establishing norms for different levels of formality.

Summary

The lexical density measure distinguished between speech situations to a limited extent in this study. It suggested that as the level of formality increases to more formal, so does the ratio of content words to all words used. Complementing this measure are two others that show similar trends, both using nouns to compute the ratios. As lexical density increases so does the relative use of nouns. In more formal situations the children in this study used more nouns, not only in relation to lexical content words, but also in relation to all words used. The ratio of adjectivals to nouns might also increase across levels of formality, but this requires further study.

The same types of ratios using verbs did not produce results that can be confidently reported. The ratios of verbs to lexical content words suggest that as the situation moves from informal to formal the number of verbs used decreases. This suggestion needs further study.

GRAMMATICAL FEATURES

Grammatical features and patterns make up the detailed system of analysis. Along with lexical density and lexical content words analysis, they are part of the mode of discourse. Grammatical features and patterns consist of three types of analysis. The first is the C-unit analysis, then follows a study of elaboration of C-units comprising clauses and phrases, and last is lexical verb analysis. In this section each of these will be treated separately and in depth. In computing the average length of C-units the C-unit Word Count was used, which should not be confused with the Lexical Word Count. Details of the C-unit Word Count are given in Chapter 4.

The C-unit word count tends to be greater than the lexical word count by up to 5%. Mean C-unit lengths were compared with those derived by Loban (1976) for sixth grade pupils. The word count procedures used in both studies are very similar, making for valid comparisons.

a. C-unit Analysis

Although the C-unit has not been used in register studies it is a validated and proven measure of both the oral and written language of elementary school children (Loban, 1976; O'Donnell, 1976). The frequency counts of C-units, C-unit word counts, and mean C-unit lengths are given in Table 19, and the following discussion is based on the data reported in that table. In the final column of the table the number in parentheses is the mean C-unit length for the talk segment of Task 4. The talk segment made up the majority of the subjects' language in that task situation, but in some instances, the mean for the whole task is lower because in the question-answer segment the speaker used many single word responses or simple unelaborated sentences or phrases.

The first question to be asked is whether or not mean C-unit length differentiates between the language situations in this study. This cannot be answered definitively, but the trends displayed in the data suggest that as the situation becomes more formal the mean C-unit length increases. This trend is apparent in the pooled data, though one discrepancy occurs in the Task 2 situation. It is necessary to

Table 19

FREQUENCIES AND MEANS FOR C-UNITS

	Total Number of C-units in Transcript				Total Number of Words in C-units (C-unit Word Count)				Average Number of Words per C-unit			
	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4
M.	205	92	81	109	1,003	501	529	939	4.893	5.446	6.531	8.615 (8.820)*
Ba.	314	96	23	70	2,048	461	110	528	6.522	4.802	4.783	7.543 (13.944)
C.	238	199	171	74	1,197	1,116	1,072	500	5.029	5.608	6.269	6.757 (8.488)
By.	231	130	24	71	1,275	624	74	430	5.519	4.800	3.083	6.056 (10.417)
Pooled	988	517	299	324	5,523	2,702	1,785	2,397	5.590	5.226	5.970	7.398

* Figures in parentheses are means for talk segment.

look at the individual means of both Ba. and By. to explain this, and a discussion along these lines follows.

Examination of the means across task situations for M. and C. reveals a trend. Mean C-unit length does differentiate consistently between task situations, and as the language situation became more formal the children used longer C-units. They were more careful in, and cognizant of, their sentence structuring in order to make their language as clear and comprehensible as possible. Although longer C-units have generally been considered a sign of more mature use of language, here it suggests a more careful, deliberate and formal use of language. In this instance maturity is not a factor because the language samples represent language use at only one point in time, that is, they do not represent developmental stages.

The consistent means across tasks for M. and C.—while this tendency is interrupted in Tasks 2 and 3 for Ba. and By.—point out a problem in register studies, particularly with children. This problem deals with the consistency of language samples in different language situations. When the C-unit word count numbers (Table 19) or the lexical word count numbers (Table 7) for Ba. are considered, it is noticeable that she was reticent in the Task 3 situation, and this reticence resulted in the lowest C-unit mean of all. Conversely, Ba. was loquacious in the Task 1 situation, resulting in the highest C-unit mean length outside of the formal situation.

The same tendency is noticeable in the results for By. His reticence in the Task 3 situation led to a low C-unit mean of 3.083, which consisted of many single word utterances of agreement ("Yeah"), and short phrase or sentence utterances of agreement. Although he was more talkative in the Task 2 situation he was still subdominant to C., and his utterances tended to support or augment those of C. A characteristic of the consultative situation may be dominance and subdominance, and this characteristic operates differently in the casual situation. The reticence and shyness of Ba. and By. in the casual and particularly the consultative situation tended to produce small or restricted language samples which gave results inconsistent with what could be expected from trends.

A comparison of C-unit length with those reported by Loban (1976, p. 35) is of interest. At the grade six level, for both sexes, the high group (high in language ability) mean was 10.32, the random group was 9.82, and the low group produced an average of 8.57 words per C-unit. These figures were for oral language usage. When compared to the figures reported in this study (Table 19, range 3.083 to 13.944) the Loban figures above seem high. However, when compared with the means for the talk segment of Task 4 (range 8.820 to 13.944) they are comparable. It would appear that the means in the Loban study are for oral language in formal situations, and this conjecture is borne out by the procedures used to collect the oral language in the Loban study. Individual children were interviewed individually by an adult and the responses tape recorded.

When determining measures of children's oral language use it is essential that the language situations be specified. Since most of the language that children use is in conversation with other children, usually in informal situations, research which can produce adequate measures for such language use are needed.

b. Elaboration of C-units

The elaboration of C-unit analyses was broken into two main components, the three major types of clauses (noun, adjective and adverb) and prepositional phrases. The choice of these items for analysis is explained in Chapter 4. For the clause analysis, the first to be discussed, the data are to be found in Table 20. The first block of columns comprises all types of clauses.

The second block of columns gives data across task situations for average length of clauses, that is, the clause word count (using C-unit word count procedures) divided by the number of clauses of all types. The pooled means (average clause length) show very little difference across task situations, though the Task 4 mean is the highest. As with other analyses previously discussed, the pooled data and the trends they suggest are mirrored in the data of one or both of the girls. For example, the Task 4 mean for Ba. is also her highest mean. The data for the boys correspond to pooled data less often. Therefore it might be tentatively hypothesized that the girls in this study were more able to adapt their language use syntactically to fit the language situation. It might also be hypothesized in this study that the data obtained from the girls were dominant, in ways other than frequency counts of linguistic items. However, another explanation is also possible, and this will be put forward after discussion of the other means and percentages in Table 20.

The third block of columns gives the means for the average number of dependent clauses per C-unit. No patterns across task

Table 20

FREQUENCY COUNTS, MEANS AND PERCENTAGES OF DEPENDENT CLAUSES FOR KEY SUBJECTS PER TASK SITUATION

	Number of Dependent Clauses				Average Clause Length (in Words)				Average Number of Dependent Clauses per C-unit				Words in Dependent Clauses as a Percentage of Words in C-units			
	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4
													%	%	%	%
M.	20	5	3	38	5.55	7.60	4.67	6.05	0.10	0.05	0.04	0.35	11.07	7.58	2.65	24.50
Ba.	44	5	2	5	6.00	6.60	4.00	7.60	0.14	0.05	0.09	0.07	12.89	7.16	7.27	7.20
C.	11	25	12	17	5.73	5.76	6.50	5.35	0.05	0.13	0.07	0.23	5.26	12.90	7.28	18.20
By.	18	9	0	8	6.06	5.22	0.00	5.75	0.08	0.07	0.00	0.11	8.55	7.53	0.00	10.70
Pooled	93	44	17	68	5.88	5.95	5.88	5.96	0.09	0.09	0.06	0.21	9.90	9.70	5.60	16.90

situations were discernible, but in the pooled data the average for the formal task situation is greater than for any of the other task situations. This is also true for three of the four key subjects. The measure of average number of dependent clauses per C-unit seems to differentiate the formal situation, as did average clause length for two of the four key subjects.

The final block of columns gives percentages for the words in dependent clauses in relation to words in C-units, or the C-unit word count. Likewise there are no trends apparent across task situations, but as noted in the previous paragraph, this measure differentiated the formal task situation. With all key subjects except Ba. the percentage is higher for Task 4 than for any of the other task situations.

To return to the second possible explanation it is necessary to note that in the three measures involving all clauses the formal situation was differentiated, quite definitely in the case of the latter two measures in Table 20. Syntactically, then, it is possible that the children in this study adopted only two broad speech styles, so that the first three task situations could be classed as informal and the Task 4 situation as the formal style. In the task situation where there was conversation and discussion, as opposed to explanation and monologue, the utterances and C-units tended to be short because monopolization of conversation is not normally appropriate. Where monopolization did occur the situation was changed to a more formal one.

A third possible explanation concerns the preparation required for the formal task situation. Unlike the other task situations key subjects were given time to prepare their talks for Task 4. All had prepared notes and, in the case of Ba. these were virtually read to the audience. Therefore, the language displayed in the formal situation, though oral, approached that of written language, where greater elaboration of language is a feature. The other three task situations, with no preparation and no written notes, provided samples of what can be described as spontaneous, unprepared oral language. In this sense Tasks 1, 2 and 3 are similar and set apart from Task 4.

One final observation stems from the analysis of words in dependent clauses expressed as a percentage of words in C-units. It has been noted previously that the percentages are generally highest in the Task 4 situation. But it may also be observed that the second highest percentages appear in the Task 1 situation in the pooled data, for M. and for By. With Ba. the Task 1 percentage is the highest of all. Aligned with this finding is the observation that language samples were generally largest in the Task 1 situation, while the number of words per C-unit was low or lowest in the intimate situation. This correspondence suggests the possibility that the intimate situation, with its high degree of shared and assumed experience and information, is characterized by greater compression of thought and language than it is in more formal situations.

The Use of Prepositional Phrases

Table 21 gives the data which describe the use of prepositional phrases by key subjects in each task situation. Gross frequency counts by themselves offer data from which no inferences can be drawn; all syntactic features must be analyzed in terms of the total body of

Table 21

FREQUENCIES AND MEANS OF PREPOSITIONAL PHRASES FOR KEY SUBJECTS PER TASK SITUATION

	Number of Prepositional Phrases				Average Number of Prepositional Phrases per C-unit			
	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4
M.	24	15	9	23	0.12	0.16	0.11	0.21
Ba.	46	5	2	18	0.15	0.05	0.09	0.26
C.	29	25	16	11	0.12	0.13	0.09	0.15
By.	34	11	2	8	0.15	0.08	0.08	0.11
Pooled	133	56	29	60	0.13	0.11	0.10	0.19

language produced. Therefore the second block of columns showing means of phrases per C-unit is the focus for this discussion. The types of comments that can be made are similar to those for clauses (pp. 219-222) so that the two measures are probably correlated.

The most important factor to be noted is that the mean for the Task 4 situation is considerably higher than are the means for the other situations when pooled, and the means are considerably higher for two key subjects, M. (0.21) and Ba. (0.26). The Task 4 mean is greater for one other key subject, C. (0.15), but to a lesser extent. Consequently, this measure of prepositional phrases differentiates the formal situation from the less formal situations, but does not differentiate consistently between those three less formal situations. Therefore, the comments made with respect to the clause analysis apply equally. For two key subjects, reflected also in the pooled mean of 0.13, the highest (By., 0.15) or second highest (Ba., 0.15) means occur in the Task 1 situation, and this same tendency was evident in the percentages recorded for dependent clauses in Table 20. That this should occur in a situation in which the largest sample of oral language was gathered, again points to the probable need for large samples of oral language for the salience of syntactic patterns to be present. There is also the possibility that the trend does indeed show a real difference despite sample size in that there was more chance to pursue a topic or a broad subject matter base in Tasks 1 and 4.

Summary

The analyses of elaboration of C-units were able to differentiate only the formal situation while the other three less formal situations were undifferentiated. Syntactic measures might therefore be less valuable than other measures, primarily lexical measures, in differentiating discrete levels of formality in language situations involving children. It is also possible that syntactically the children in this study adopted two broad uses in oral language, one for conversation and discussion, the other for explanation and presentation in a monologue fashion. Use of the former might account for the generally lower numbers obtained for the first three task situations, while use of the latter might account for the numbers obtained for the Task 4 situation. The separate measures of clauses and prepositional phrases suggest this type of explanation.

c. Lexical Verb Analysis: Type-Token Ratio

The type-token ratio (TTR) was used to compute this measure of the use of a range of verbs by key subjects across task situations. The procedures followed in this analysis are outlined in Chapter 4. An analysis of the verbs and adverbs in the lexical content words analysis reported earlier in this chapter concluded that such verb analysis was not able to provide any differentiatory power by which one could describe differences between task situations. The lexical verb analysis using the TTR allows another method of examining the use of verbs. A different method of counting verbs in used than was employed for the lexical content words count.

This second approach to the analysis of verbs does not reveal any trends in the use of verbs across task situations. (The data for this discussion appear in Table 22.) The lexical verb TTR does not function to differentiate the formal situation from the other situations. What seems to be evident is that the Task 3 situation produces the lowest TTRs for lexical verbs. The pooled mean is the lowest by 8% to 11%, and the means for both M. and C. are the lowest in all four task situations. There are no reliable means available for the other two key subjects because their language samples were small in this Task 3 situation.

The circumstances inherent in the consultative situation may lead to the low type-token ratios of lexical verbs. In this situation there were six speakers who were sometimes vying for an opportunity to speak. Utterances were short with the resultant low average number of prepositional phrases per C-unit, words in dependent clauses as a percentage of words in C-units, average clause length, etc.

Conversely the highest TTRs are reported for the first two task situations. Likewise, the means for both girls (0.61) are highest for Task 2, and the mean for By. is highest for Task 1 (0.65). Because these means approximate the means for the formal task situation, no inferences can be made. It would seem that an analysis of verbs in this study does not provide a useful means of differentiating language situations in children's oral language use.

LINGUISTIC DOMINANCE

This analysis is part of the style or tenor of discourse which is concerned with the nature of feedback. Feedback may be in the form of linguistic response, or it may be in the form of functional

Table 22

TYPE-TOKEN RATIOS OF LEXICAL VERBS FOR KEY SUBJECTS PER TASK SITUATION

	Task 1				Task 2				Task 3				Task 4		
	Segment				Segment				Segment						
	1	2	3	Mean	1	2	3	Mean	1	2	3	Mean	Talk Segment	Q-A Segment	Mean
M.	0.54	0.58	0.62[a]	0.58	0.61	--	--	0.61	0.46	--	--	0.46	0.50	0.66	0.58
Ba.	0.66	0.51	0.64	0.60	0.61	--	--	0.61	--	--	--	--	Combined 0.56		0.56
C.	0.61	0.61	0.63[a]	0.62	0.58	0.64	0.62[a]	0.61	0.49	0.45	0.60[a]	0.51	Combined 0.52		0.52
By.	0.69	0.63	0.63	0.65	0.61	--	--	0.61	--	--	--	--	Combined 0.65		0.65
Pooled	2.50	2.33	2.52	0.61	2.41	0.64	0.62	0.61	0.95	0.45	0.60	0.50	2.89		0.58

[a] Computed from a partial TTR segment.

nonlinguistic features of communication. Since an analysis of nonlinguistic features has previously been described (pp. 157-177), the linguistic dominance approach to feedback is dealt with in this section. Linguistic dominance, a global approach to feedback, allows for a study of the degree of participation of each speaker in each language situation.

The lexical word count procedure is the one used to compute the percentages of language used by each key subject in each task situation. These percentages allow statements to be made about the dominance of key subjects in task situations. In the Task 4 situation two percentages are used, one for the question-answer segment, and one for the total language produced in that task situation.

Table 23 and Figure 13 present the data which form the basis for this discussion. Some comments need to be made concerning the numbers presented in order to avoid confusion over what may superficially appear to be computational errors. The Total for Task rows, counts and percentages, include the lexical word counts of all subjects in each situation: these two final rows are not additive totals. Second, because there were two separate instances of each situation, one for the girls and one for the boys, the data must be presented in two units. The Totals for Task must be totals for each unit only since grand totals cannot be calculated. By computing grand totals it would have been assumed that there was one instance only of each situation. Subsequently the plotting of a mean in Figure 13 would have been misleading.

Using a probability distribution, it could be hypothesized,

Table 23

LEXICAL WORD COUNT TOTALS AND PERCENTAGES FOR KEY SUBJECTS PER TASK SITUATION

	Lexical Word Count					Lexical Word Count as a Percentage of Total Lexical Word Count for Task				
				Task 4					Task 4	
	Task 1	Task 2	Task 3	Q-A Segment	Total Task	Task 1	Task 2	Task 3	Q-A Segment	Total Task
M.	953	494	509	205	913	32.57	16.24	17.25	61.38	87.62
Ba.	1,973	450	95	257	507	67.43	14.80	3.22	54.68	70.42
Total for Task[a]	2,926	3,041	2,950	806	1,764	100	31.04	20.47	57.32	80.50
C.	1,115	1,053	1,006	136	466	48.46	44.43	55.15	73.91	90.49
By.	1,186	573	70	161	397	51.54	24.17	3.84	51.77	72.18
Total for Task[a]	2,301	2,370	1,824	495	1,065	100	68.61	58.99	60.00	81.03

[a] Total for all subjects in task situation.

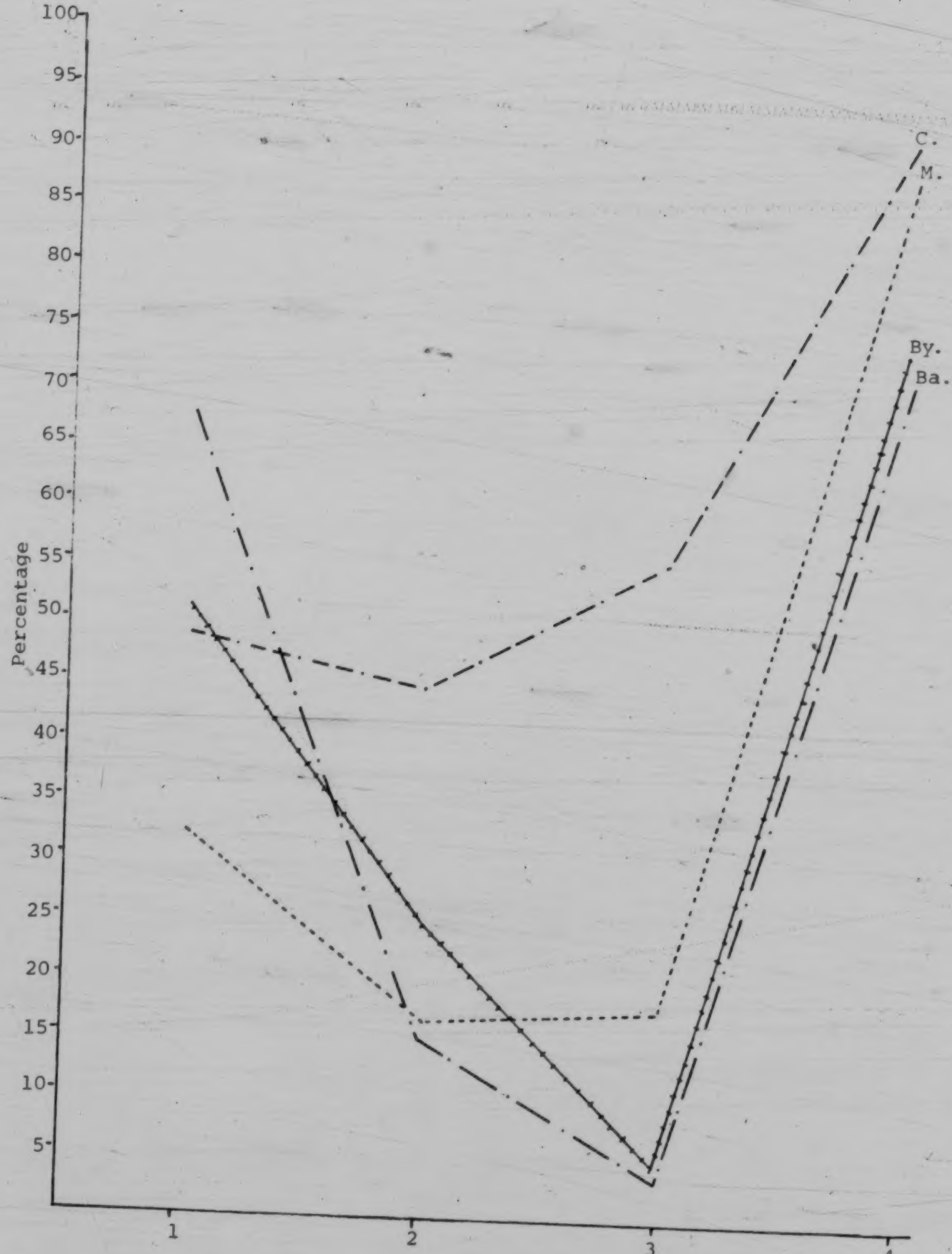


Figure 13
LEXICAL WORD COUNT AS A PERCENTAGE OF TOTAL LEXICAL WORD COUNT FOR KEY SUBJECTS PER TASK SITUATION

from the number of subjects in each task situation, that the following percentages would describe the linguistic participation of each key subject in his or her respective task situation group: Task 1, 50%; Task 2, 25%; Task 3, 16.67%; Task 4, n%. It is conceivable to expect the Task 4 percentage to be the highest.

The actual percentages computed for this study are quite different from the hypothesized ones, though the overall trend follows that which the probability distribution would predict. The results also add further credence to some of the statements made in earlier discussions regarding the importance of individual characteristics in oral language situations. From Figure 13 it can be seen that C. is a dominant speaker and group member, except in the intimate situation, so that feedback was minimized as he controlled the situations, being the dominant speaker in each. This was reflected in the subject matter analysis described at the beginning of this chapter. C. was likewise the most dominant of all key subjects in the formal situation, and in the question-answer segment of that situation where feedback was built into the task situation, his percentage was also highest.

This high degree of dominance makes C's presence in a casual or consultative situation such that it is likely to distort the true characteristics of that sociolinguistic setting. C., in these situations, was more of a dominator than a leader. It is interesting to compare C's figures with those of M., who has also been described as a leader and who enjoys the respect and friendship of her peers. M. was subdominant in the intimate situation, tended to be in the casual situation, contributed according to the computed probability in the consultative situation, and was definitely dominant, as expected, in the formal situation. Although M. was dominant in Task 4, the percentage for the question-answer segment (61.38) shows that she invited and received more feedback than did C. with 73.91% dominance.

The investigator would argue that a leader in a language situation need not be linguistically dominant, and in fact being so might well alter the characteristics of the situation, rendering the leader a manipulator and/or dominator. In a consultative situation the characteristics include the sharing of ideas, thoughts, facts and knowledge. When the sharing is dominated by one person the situation changes to a formal one or to a casual-intimate one as these are the situations where high linguistic dominance is expected.

The percentages as graphed for Ba. and By. show many similarities. Similarities in other types of analyses have also been alluded to, as they have for M. and C. By's linguistic contributions in Tasks 1 and 2 are what might be expected from a probability computation, but in the Task 3 situation his reticence and shyness in the group is evident. In the formal situation By. is less dominant than either M. or C., and in the question-answer segment he only contributed about half of the language because of his tendency to answer in short, unelaborated utterances. Often his response was a simple "Yes." He had to be prodded with questions to obtain more information and to expand on a previous question. The investigator himself had to ask some questions in order to encourage audience members to question By. as his one-word responses tended to discourage questioning.

Ba. was dominant in the intimate situation where it was evident that she was at ease and garrulous. In the casual situation her contribution was just slightly less than that of M., from whom she seemed to gain confidence in the casual and consultative situations. However, her contribution in Task 3 was like By's, that is, minimal, indicating her reticence and discomfort in the larger, more formal situation with relative strangers. In the formal situation her overall dominance was the lowest of the key subjects, but close to that of By. In the question-answer segment she contributed only slightly more than half of the total language used, with terse responses that were bereft of elaboration and which did not encourage many questions.

Summary

An analysis of linguistic dominance provides a tool with which statements can be made about the linguistic contribution of speakers in different language situations. It also provides a broad measure of linguistic feedback. In this research the measure made possible identification of dominant and subdominant speakers: the nature of dominance agreed with similar characteristics of speakers revealed in other analyses. Although the individual characteristics of speakers make it impossible to predict through probability distribution their linguistic contributions in certain language situations, there are, nevertheless, reasonable expectations which can provide guidelines for the researcher. Where speakers contribute language samples that are highly discrepant with these expectations, then there is reason to believe that the characteristics of that language situation are being skewed towards a language situation where a higher dominance is anticipated. Such situations occur towards either end or at either end of the intimate-formal spectrum. The formal situation provides the characteristics for the highest degree of dominance, the intimate situation the next highest.

EXTRANEOUS LINGUISTIC MATERIAL

The presence of extraneous linguistic material (ELM) gives an indication of the degree of fluency of the user's speech in the particular speech situation. It is known that the presence of ELM is much more prevalent in spoken language than in written language, and in formal written language it is probably non-existent, unless used deliberately for purposes of stress or when providing an example. Likewise, in spoken formal language its presence is minimal, but not non-existent, even when the speaker orates from a written text. It is a characteristic of all spoken language that extraneous linguistic material is present. The degree varies, from what we can expect as greater use in informal situations to lesser use in formal situations.

In this study four types of ELM have been identified from the transcribed texts. The four types of ELM are Audible Pauses, Filler Words and Phrases, Repetitions, and Edit Mazes (or False Starts). Definitions and examples of the types appear in Chapter 4. In keeping with the investigator's intention of interlinking the methods of analysis, appropriate to the concept of a context of situation in which sociolinguistic variables are interrelated, ELM analysis is computed also in terms of lexical word count and C-units.

In the tables and figures to follow several different types of counts are used. The Extraneous Linguistic Material Count is the equivalent of the C-unit Word Count, where all ELM "words" are counted.

There may be several words to each occurrence, and this is especially true for filler phrases, repetitions, and edit mazes. The Extraneous Linguistic Material Occurrences Count is the number of times an ELM unit, regardless of length, occurs in the transcripts.

Table 24 provides the basic data with the count of extraneous linguistic material (ELM) and the count of each occurrence of ELM. The average number of words per occurrence is also given. In Table 25 the ELM analysis is related to other types of counts and analyses including lexical word count, words in C-units, and C-units. Table 26 gives a breakdown of the four types of ELM.

Few inferences can be drawn from the means in the final block of columns in Table 24, except that the highest mean for pooled data of the subjects and for the two girl subjects occurs in the Task 4 situation. These higher means suggest that ELM utterances in the formal situation are longer than the utterances that occur in other situations. This tendency is matched with the type of ELM which dominates in the formal situation. The four types of ELM for each and all key subjects per task situation is provided in Table 26 on page 238.

From the data in Table 26 it can be seen that in the Task 4 situation audible pauses are fewest but for the same formal task situation the edit maze occurred more than in any other task situation. (See also Figure 14.) Edit mazes tend to be lengthy because an entire phrase, clause, and sometimes almost a sentence is abandoned and a new one begun. Audible pauses, on the other hand, are mostly of one "word" only, and at the most a repetition of that "word" or sound, such as "Oh, oh." The occurrence of more edit mazes suggests

Table 24

EXTRANEOUS LINGUISTIC MATERIAL FREQUENCY COUNTS, OCCURRENCES AND MEANS FOR KEY SUBJECTS PER TASK SITUATION, AND KEY SUBJECTS POOLED

	Extraneous Linguistic Material Count				Extraneous Linguistic Material Occurrences				Average Number of ELM Words per Occurrence			
	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4
M.	77	60	49	137	59	35	36	73	1.31	1.71	1.36	1.88
Ba.	295	56	12	111	169	37	7	44	1.75	1.51	1.71	2.52
C.	107	107	175	55	73	65	94	35	1.47	1.65	1.86	1.57
By.	142	39	2	31	70	24	2	22	2.03	1.63	1.00	1.41
Pooled	621	262	238	334	371	161	139	174	1.67	1.63	1.71	1.92

Table 25

PERCENTAGES OF EXTRANEOUS LINGUISTIC MATERIAL TO LEXICAL WORD COUNT, WORDS IN C-UNITS, AND C-UNITS FOR INDIVIDUAL AND POOLED KEY SUBJECTS PER TASK SITUATION

	Percentage of ELM Count to Lexical Word Count				ELM Count as a Percentage of Words in C-units				ELM Occurrences as a Percentage of C-units			
	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4
M.	8.08	12.15	9.63	15.01	7.68	11.98	9.26	14.59	28.78	39.04	44.44	66.97
Ba.	14.95	12.44	12.63	21.89	14.40	12.15	10.91	21.02	53.82	38.54	30.43	62.86
C.	9.60	10.16	17.40	11.80	8.84	9.59	16.32	11.00	30.67	32.66	54.97	47.30
By.	11.97	6.81	2.86	7.81	11.14	6.25	2.70	7.21	30.30	18.46	18.46	31.00
Pooled	11.88	10.19	14.17	14.63	11.24	9.70	13.13	13.94	37.55	31.14	46.49	53.70

Table 26

PERCENTAGES OF EACH TYPE OF EXTRANEOUS LINGUISTIC MATERIAL OCCURRENCE TO ALL EXTRANEOUS LINGUISTIC MATERIAL OCCURRENCES

	Percentage of Each Type of Extraneous Linguisitic Material to Extraneous Linguistic Material Occurrences															
	Audible Pauses				Filler Words and Phrases				Repetitions				Edit Mazes			
	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4	Task 1	Task 2	Task 3	Task 4
M.	64.41	45.71	33.33	27.40	6.78	25.71	47.22	34.25	11.86	11.43	5.56	8.22	16.95	17.14	13.89	30.14
Ba.	31.36	51.35	14.29	13.64	20.71	10.81	14.29	25.00	29.59	21.62	57.14	18.18	18.34	16.22	14.29	43.18
C.	32.88	24.62	20.21	11.43	32.88	30.77	58.51	77.14	13.70	21.54	2.13	2.86	20.55	23.08	19.15	8.57
By.	34.29	54.17	50.00	18.18	35.71	25.00	50.00	36.36	11.43	4.17	0.00	22.73	18.57	16.67	0.00	22.73
Pooled	37.47	39.75	23.74	19.54	23.72	24.22	53.24	40.80	20.22	16.77	5.76	11.49	18.60	19.25	17.27	28.16

that in the formal situation the children were more aware of the need for syntactic correctness in a standard use of language. They were also probably aware that informal items, of which audible pauses are a major part, are not really acceptable in a formal speech situation.

In general, the means of ELM "words" per ELM occurrence in Table 24 are somewhat similar for the first three task situations, and the means for pooled subjects vary by only 0.08. This measure successfully differentiates the formal situation, but as with some previous analyses described in this chapter, the first three situations appear to be undifferentiated. At first glance it may seem as if the children in this study interpret the language acceptability to be the same for any situation where they are talking among their peers. Clearly this notion is an overgeneralization because some measures have differentiated between task situations. However, metalinguistically children possibly are overtly aware of the need to change their language style for a distinctly formal language situation, while all that is not construed as a formal situation is treated as generally informal. The degrees of informality are less pronounced than are the differences between broadly informal and formal situations.

Table 25 presents the data for percentages of ELM firstly, to lexical word count, then for words in C-units, and lastly for C-unit occurrences or number of C-units. The first two major column blocks of Table 25 are similar and neither one offers any information from which inferences can be confidently made. What is evident in both of these ELM analyses is the reticence of By. throughout the Task 3 and 4 situations, for which percentages are very low. In the intimate situation, where By. was clearly at ease and his linguistic contribution was as expected in terms of amount of language, his use of ELM was similar to that of all the key subjects. In the formal situation (Task 4) the percentages for By. are much lower than are the pooled percentages, due primarily to his terse and unexpanded responses in the question-answer segment discussed previously.

The most useful of the analyses undertaken for ELM is that of ELM occurrences as a percentage of C-units. These data appear in the final major column block of Table 25 and are graphed in Figure 14. The general tendency evident from these percentages for pooled subjects is an increase across situations from casual to formal, with a decrease from intimate to casual. The percentages for M. show a steady increase across task situations. For three of the four key subjects the increase is between Tasks 3 and 4, so that the formal situation is clearly differentiated by this analysis, except for the one key subject C. Most of the percentages for Task 1 are in the vicinity of 30%, with the one exception of Ba. Ba. was a very voluble and excited speaker in the intimate situation, a characteristic that reversed when other children were added to make a different situation.

The occurrence of ELM is probably related to the garrulity and excitability of a speaker. When a speaker is excited, the rate of speaking increases, linguistic caution is thrown aside, and more language tangles and mazes occur. An example is Ba's linguistic behaviour in the intimate situation. As the speaker becomes reticent or reserved, as happened with Ba. and By. in the Task 2 and 3 situations, the use of mazes and language tangles decreases, reflecting

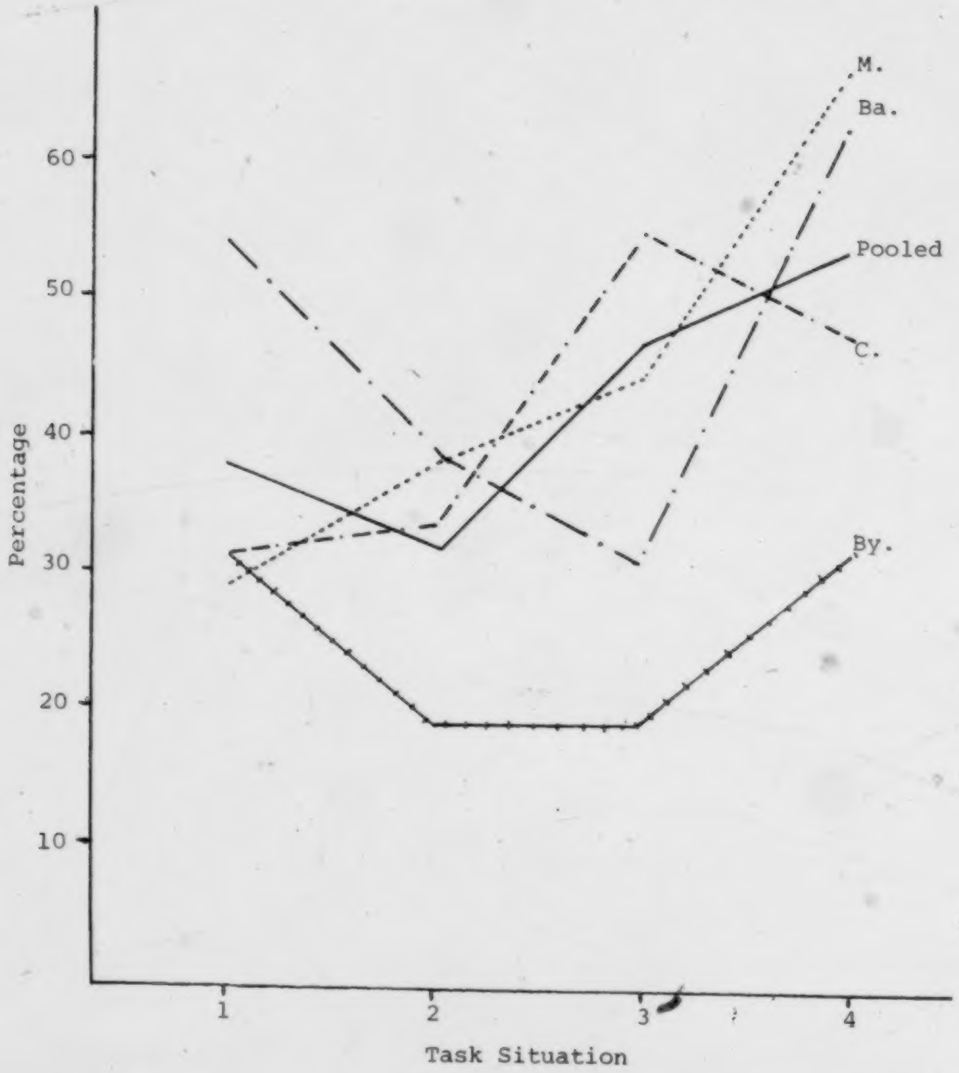


Figure 14

EXTRANEOUS LINGUISTIC MATERIAL OCCURRENCES EXPRESSED AS A PERCENTAGE OF NUMBER OF C-UNITS FOR INDIVIDUAL AND POOLED KEY SUBJECTS PER TASK SITUATION the more deliberate and careful use of speech along with the reduced linguistic contribution to the situation.

In all instances but one, the percentages of ELM occurrences to the number of C-units were greatest in the formal task situation. (See Table 25 and Figure 14.) These figures must not be read to suggest that there was an increase in the use of ELM in the formal situation. Rather, the higher figures result from the fact that C-unit length was greatest in the formal situation, so that for a given quantity of language there were fewer C-units in the formal situation than in any of the other three task situations.

Even so the percentages for ELM count to lexical word count and C-unit word count in Table 25 show that there was greater use of ELM in the formal situation than in most other situations. The large increase in the occurrence of edit mazes in the formal situation over other task situations will explain this.

Another valuable method of analysis is that which shows the percentage of each type of ELM to all ELM occurrences. These data appear in Table 26. Distinct tendencies exist in the occurrence of audible pauses and edit mazes, while the percentages suggest a tendency might be inferred for repetitions. Only in the case of C. is any specific tendency obvious for filler words and phrases. Apart from individual characteristics no further description of this type of ELM can add to the discussion.

For repetitions the low percentages typically occur in the formal and consultative situations. This tendency suggests that in the more formal situations the children in this study were more thoughtful when using language and as a consequence, repetitions were fewer. However, such a suggestion is dubious when it is considered that the percentage of mazes increased noticeably in the formal situation, and generally least in the consultative situation. A more plausible explanation is that in these two situations there were interruptions by other members. In many cases, when a speaker was interrupted, he repeated part of his previous utterance when he resumed speaking after the interruption. In the formal situation there were no interruptions, interruptions being inappropriate in that setting.

In Figure 15 percentages for audible pauses to ELM occurrences have been plotted. The general trend is towards a decline across task situations, with a slight increase from Task 1 to 2. With the two dominant speakers, M. and C., the decline across task situations is a steady one. However, with Ba. and By. there is a sudden increase for Task 2, and this influences the pooled percentage for Task 2 by showing an increase. Because By. was clearly subdominant to C. in the Task 3 situation, many of his audible pause occurrences were in the form of "ah" or "oh" to statements by C. But subdominance was not a major factor with Ba. in this task situation, though she used "oh" many times. By's subdominance is also obvious in the Task 3 situation, where he made hardly any linguistic contribution at all.

A decline in audible pauses across situations from informal to formal might be expected. It can be inferred that the use of audible pauses such as "oh," "um," and "ah" are associated with informal situations, but they were not considered appropriate by the children

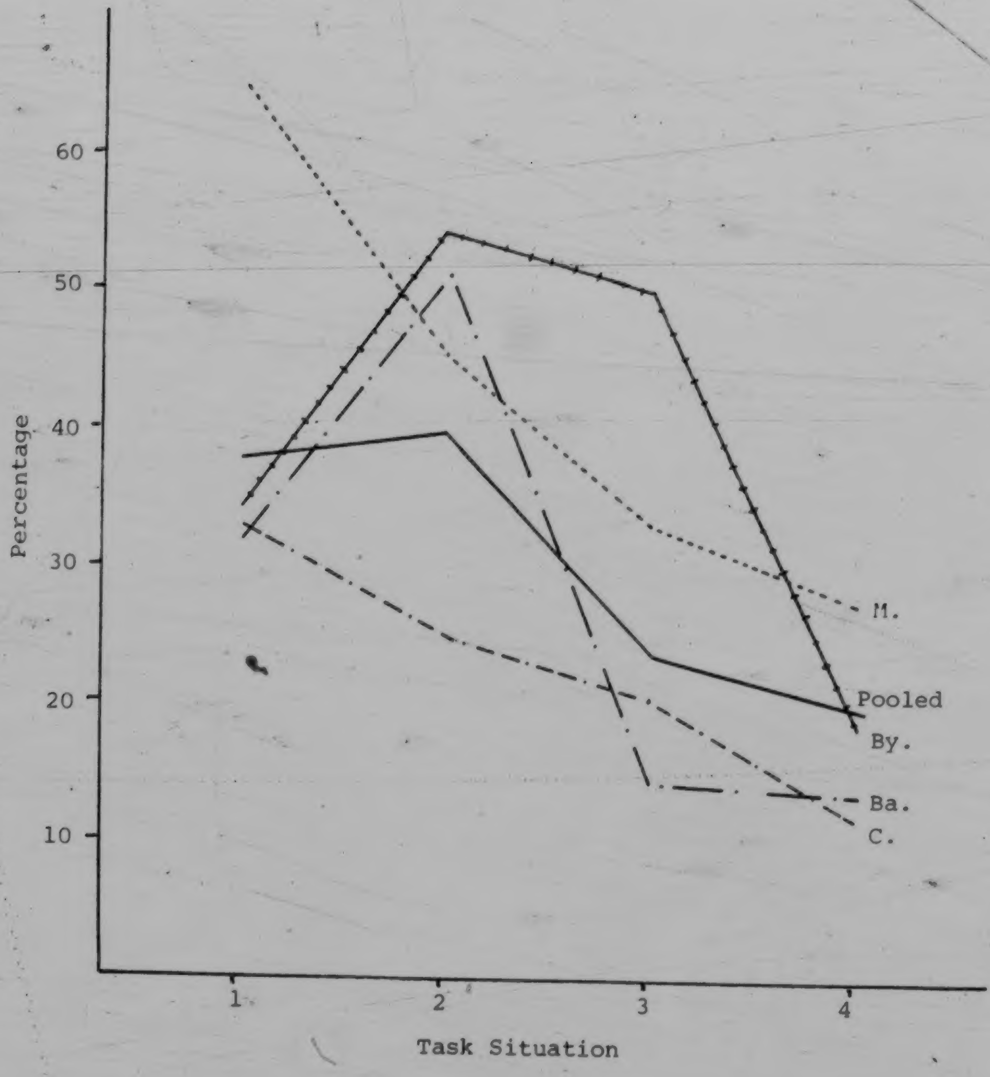


Figure 15

PERCENTAGE OF AUDIBLE PAUSES TO EXTRANEOUS LINGUISTIC MATERIAL OCCURRENCES FOR INDIVIDUAL AND POOLED KEY SUBJECTS PER TASK SITUATION in this study in the formal situation, especially since they had the opportunity to prepare and even rehearse their presentations.

The percent occurrences of edit mazes, graphed in Figure 16, reveal a tendency for an increase in the use of edit mazes in the formal situation. The measure of edit mazes seems to differentiate the formal situation and not the other three, where the occurrence of edit mazes is fairly steady, decreasing slightly in Task 3.

The need to be cognizant of an acceptable use of language for a formal situation can be posited as an explanation for the results of the edit maze analysis. Even though language is formulated to an acceptable standard in the speaker's mind before being phonologically produced, it seems as though some editing features can only be carried out when language is produced and can be heard by the speaker himself. In written language this process can be carried out orally before the edited version is committed to paper. In oral language, because this editing function must take place at that level, there can never be perfectly edited oral language. Even if a speaker were able to edit fully before making an utterance, the speed of delivery would be so painfully slow that listeners would quickly abandon the speech situation, or else take it over themselves.

The increase in edit mazes then, in the formal situation, quite likely amplifies the speaker's attempts to produce a formally-acceptable style and use of language. It also reveals the train of logic that the speaker is adopting or formulating. Edit mazes seem to be less intrusive in the language sample than do other ELM types, especially audible pauses and filler words. Any intrusiveness is

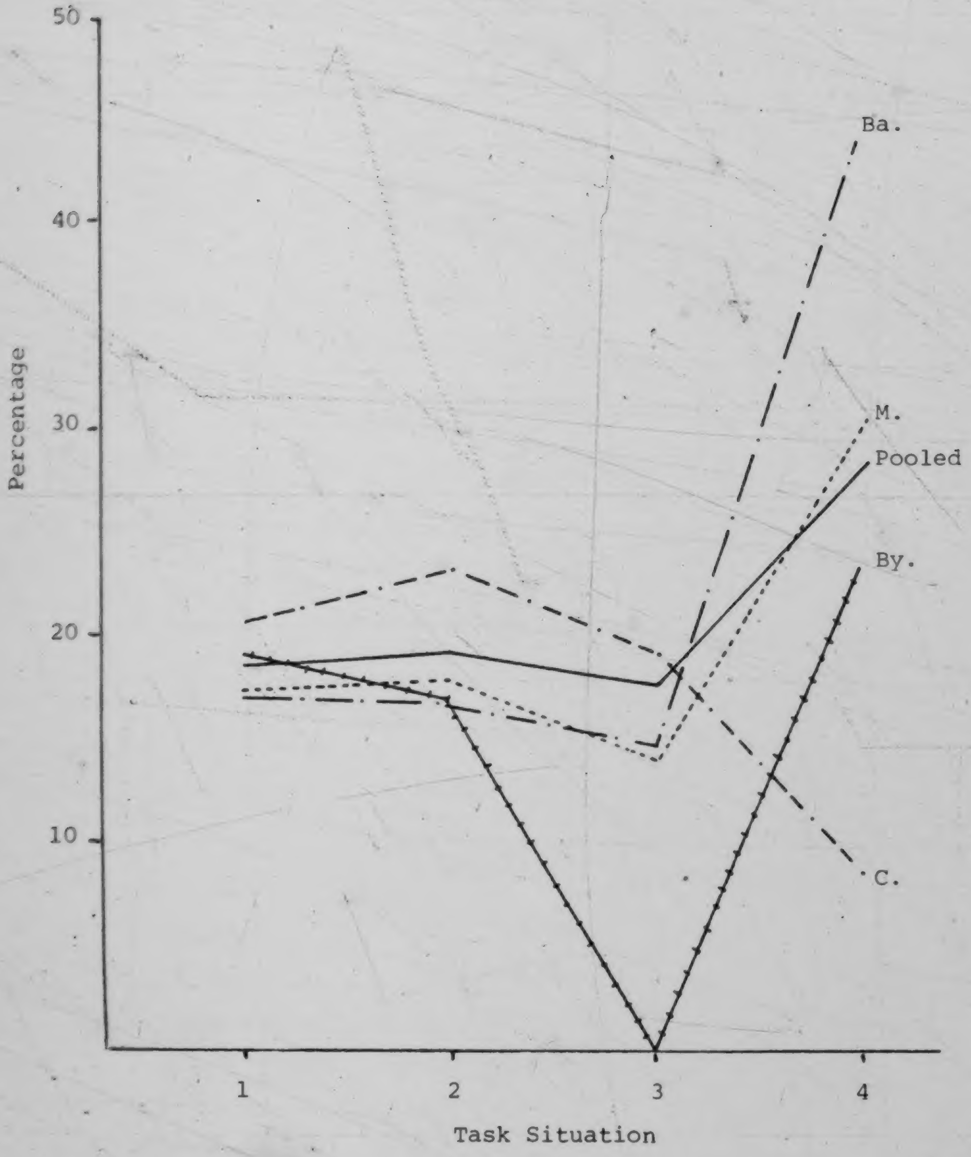


Figure 16

PERCENTAGE OF EDIT MAZES TO EXTRANEOUS LINGUISTIC MATERIAL OCCURRENCES FOR INDIVIDUAL AND POOLED KEY SUBJECTS PER TASK SITUATION usually only in the transcribed form of oral language, which is also the beginning of analysis. Frequently edit mazes only differ in one way from the corrected version or restart which follows. This difference might be a change in gender, from "him" to "her" or vice versa, or a change from singular to plural or vice versa.

SUMMARY

This chapter has set out to report the various analyses and to describe the characteristics of the data in ways which are the most illustrative of the language and the situations in which they occur. The various analyses were reported and discussed in the same order in which they have been set out in the situational categorization at the beginning of Chapter 4. At times it has been necessary to describe a particular feature of language analysis, such as Extraneous Linguistic Material or Lexical Verb Analysis, in terms of other types of analysis, in order to search out possible differentiators between language situations. This integrated approach was also adopted because the whole meaning of a context of situation implies the interplay and interrelationships of all sociolinguistic factors in language usage.

The use of pooled data allowed for a norm of some validity which could be used to suggest trends and to describe discrepant data characteristics of individual subjects. In no way can these pooled data be considered a norm for language use or features of language in various sociolinguistic settings. Further research needs to be undertaken with a wide variety of subjects to validate various measures used in this study and to establish ranges of usage for particular linguistic factors in clearly-defined sociolinguistic settings.

Chapter 6

SUMMARY, CONCLUSIONS, IMPLICATIONS FOR EDUCATION AND FOR FURTHER RESEARCH

INTRODUCTION

In order that a child be able to participate successfully in a variety of social situations he must be able to adapt his language to the context of situation which comprises the particular social setting. The ability to achieve this multifaceted use of language is achieved through the acquisition and development of a register or speech styles.

The purpose of this study was to discover if a repertoire of situational language was evident among selected sixth grade children. In order to do this it was necessary to develop task situations through the building of contexts of situation which would provide children with an opportunity to use different language registers. The development of a research methodology was one of the major aspects of the study. The grade six level was selected because it was considered by the investigator to be the most likely level in the elementary school which would ensure the occurrence of a repertoire of situational language use should such be present in the language of elementary school children.

The chapter begins with a summary of the design and study procedures, then follow the conclusions based on the research questions. Implications for education and further research conclude the chapter.

SUMMARY OF THE STUDY

The summary is divided into two major parts beginning with the design and procedures, and followed by a general account of the findings as reported in Chapter 5. The more specific and detailed discussion of conclusions will follow in the section which answers the research questions.

SUMMARY: DESIGN AND PROCEDURES

In order to examine the occurrence of a repertoire of situational language use it was necessary to develop task situations in which children could use language which would typify that used in a sociolinguistic situation. Therefore task situations were developed through the manipulation of all sociolinguistic factors identified within the framework of a context of situation gleaned from the literature. Situations were differentiated along a continuum of informal-formal in light of four of the five language styles identified by Joos (1960, 1967).

Two girls and two boys at the sixth grade level and forming dyads, made up the subjects. They appeared in the first task situation in two separate groups. One boy and one girl were added to each group to make up the four subjects for the second task situation, and another boy and girl again were added to each group to constitute the third task situation. In the fourth and formal task situation each of the four key subjects gave an oral presentation to a group of twelve peers. All subjects except the boy and girl added to each group to create the third task situation were drawn from the same grade six classroom.

Key subjects were chosen on the basis of at least average linguistic ability and academic achievement, as assessed by the classroom teacher. Members of each dyad were also intimate friends. Other subjects were chosen on the same basis except that a sociometric survey undertaken by the investigator identified them as friends of the key subjects. The subjects added to make the third task situation were relative strangers from another grade six class. Audience members for the fourth task situation were chosen by the classroom teacher.

The language produced during each task was recorded by audio and video equipment and transcribed by the investigator. All linguistic and nonlinguistic features were matched in the transcripts. Nonlinguistic features were analyzed along with linguistic features of communication. An analysis of the subject matter of discourse was undertaken with respect to all the data. All other analyses focused on the data provided by the key subjects in each task situation, but of necessity these analyses were sometimes in relation to all the data collected.

Analyses focused on as many factors of the context of situation as was possible so that a wide variety of analyses were used. These covered subject matter, nonlinguistic features, vocabulary items, grammatical features, linguistic feedback, and linguistic features prominent in oral language. Research questions were posed based on the context of situation and on the theoretical construct of the study.

Where systems of analysis were developed by the investigator they were validated by competent people in the field of language arts and elementary education. In the case of measures already validated from research, like people were used to perform reliability checks.

SUMMARY: GENERAL FINDINGS

Eleven major types of analysis were performed on the data, primarily the data provided by the key subjects in each task situation, but with some analyses the focus was on all data. Within some of the major analyses there were subanalyses undertaken, as in the case of elaboration of C-units. Subanalyses will be summarized along with the major analyses. Some of the analyses differentiate the formal situation only, while other analyses differentiate between each task situation.

a. Subject Matter Maintenance and Switching

The analysis of subject matter showed differentiation of subject matter between task situations and therefore levels of formality. The range and variety of subject matter were greatest in the intimate situation while subject topics were fully maintained in the more formal situations. Experiential bases were primarily of a shared personal nature in informal situations while personal and planning experiences dominated in more formal situations. Some sex differences were noted in preferences for types of subject topics, while humour played a role maintenance part in the boys' group.

b. Nonlinguistic Features of Communication

As with the subject matter analysis the investigator found it necessary to develop a scheme of analysis for nonlinguistic features of communication. Discussion focused on differences in use across task situations, and differences in use between key subjects. Nonlinguistic features were divided into the two main types of functional and nonfunctional. Certain features were found to be prominent in various task situations, and eye contact featured in the intimate situation. In the formal situation the use of nonlinguistic features was minimal, with the conveyance of meaning resting heavily with linguistic utterance. Individual use of nonlinguistic features was closely linked with personality characteristics of key subjects, including degree of group dominance and subdominance.

c. Lexical Diversity

This analysis used the type-token ratio to explore the breadth of vocabulary in language samples. Lexical diversity tended to be greater in both the casual and formal situations, and in order to explain these findings it is necessary to consider sex (group) differences along with group choices of subject matter. This measure differentiated the casual and formal situations from the other two situations, but no further differentiation was possible.

d. Contractions, Compactions and Truncations

The study of these lexical items provided a measure of the lexical uniqueness of the language samples. A trend was apparent in the use of contractions, with an increase in use in more formal situations. It was not that a greater range of contractions was used, rather several types were used over again. Abbreviated language forms, especially contractions, seemed to be acceptable language forms in any situation for the children in this study. Sex differences in the use of these abbreviated forms of language were also noted, with the boys less aware than the girls of matching acceptable forms to situations. The boys' awareness was more with colloquial and standard forms of the same abbreviated form.

e. Colloquial and Standard Forms of "Yes"

This type of analysis represents another approach to the study of lexical uniqueness, and it contrasts forms of the same lexical item in different situations. The use of the standard form was as one might expect, with minimal use in the informal situations but with increased use in the formal situation. There were individual differences noted with the colloquial form being the only one used in all situations but the formal by one subject. The analysis only differentiated the formal situation. The colloquial form was the standard one for the children in all task situations.

f. Lexical Density

This measure shows promise as a differentiator of task situations, though it most successfully differentiated the formal situation in this study. The trend is for a higher density of content words in more formal situations. The close grouping of ratios for different subjects suggests that norms might be identifiable for different situations, and particularly for the consultative situation in this study. The subanalysis of lexical content words showed that only nouns proved a useful data source. As the level of formality moved to more formal so did the relative use of nouns increase.

g. C-unit Analysis

This measure is not definitive in the study in differentiating between language situations, but trends in the results suggest that as the situation became more formal the mean C-unit length increased. This trend is more apparent with the dominant key subjects. The problem of reticence was apparent in short utterances producing C-units of minimal length. A comparison with the 1976 Loban study suggested the importance of specifying the language situation when applying syntactic measures to children's oral language.

h. Elaboration of C-units

Syntactic elaboration analysis measured the three types of dependent clauses, and prepositional phrases, within C-units. The results for both clauses and prepositional phrases were very similar. Elaboration analysis tended to differentiate the formal situation but not the three less formal situations. Sex differences were apparent with the girls tending to greater syntactic control of language in different situations.

i. Lexical Verb Analysis

This second analysis of verbs, like the first approach in the lexical content words analysis, was not able to provide any evidence for differentiating between task situations. This measure did not even differentiate the formal situation. The consultative situation was highlighted by its low figures, which might substantiate certain characteristics of that task situation.

j. Linguistic Dominance

The analysis of linguistic dominance provides a measure of linguistic involvement and feedback in different task situations. It also identifies degrees of dominance and subdominance by speakers in each task situation. The degree of participation in each situation is predictable from probability distributions, though individual personality characteristics and differences account for great discrepancies between expected and actual degrees of participation. Highly dominant speakers in the median range of the informal-to-formal spectrum function to change the situation towards either highly informal or formal.

k. Extraneous Linguistic Material (ELM)

Although closely linked with the grammatical analyses this aspect of oral language was treated separately because of its interest and wide implications for fluency. It was found that each of the four types of ELM appeared in different proportions in each task situation. The trends evident for audible pauses and edit mazes are prominent, with audible pauses decreasing as the situation becomes more formal, and this decrease a steady one with the dominant key subjects. With edit mazes there was a sharp increase in the formal situation, thereby differentiating this task situation.

CONCLUSIONS: THE RESEARCH QUESTIONS

With repect to the delimitations and limitations of the study as identified in Chapter 1, the conclusions that can be drawn from the answering of the research questions point out promising directions for further research in the speech styles of elementary school children. The conclusions also have ramifications for curriculum concerns in language arts.

QUESTION 1

> Do the children in the study have a repertoire of roles and role-relations which are differentiated by the nature of language used in different social situations?

Considering all of the analyses applied to the language samples of the four key subjects used in this study, it is evident that the children do possess a repertoire of roles and role-relations that are identifiable with language use in different task situations. However, to call these speech styles at this stage might be drawing premature conclusions.

The children in the study definitely displayed a repertoire of language roles which can be described in general terms as formal and informal. Most of the analyses definitely differentiated a formal style of language but tended to show considerable linguistic similarity among the other three task situations. This would suggest that the children have a repertoire of two sociolinguistic roles, one formal and one informal, the latter being used in all situations except the distinctly formal ones. Even in the distinctly formal situations the boys in the study tended to introduce informal elements which, although often considered inappropriate in adult usage, they nevertheless used in an attempt to informalize a role which for them was uncomfortable and restrictive.

Some analyses, such as the lexical density analysis, were more powerful and differentiated each of the four task situations to suggest the presence of a repertoire of four roles. But it seemed clear to the investigator that the children in general were not aware of any need to adopt language use to suit the roles required of the intimate, casual and consultative situations, although that awareness was present for the formal situation.

Broad and clearly-defined roles are distinguishable for formal and generally informal sociolinguistic situations, but much less obvious roles can be distinguished for the three less formal situations present in this study. Role-relations are identifiable through such analyses as linguistic dominance, and types of role-relations are differentiated for individual subjects in different task situations. The role-relations in this study can be viewed in terms of dominant/subdominant, peer/peer, friend/friend, and in the case of the formal situation, speaker/audience.

QUESTION 2

> Is the use of a variety of social situations and different contexts of situation a promising method of designing language tasks to evoke children's oral language?

In the classroom situation the role-relation is that of teacher/pupil most of the time, with the occasional pupil/pupil role-relation. The styles normally considered appropriate in the classroom are the formal and consultative ones. From the analyses carried out in this study it seems evident that children at the grade six level at least are likely to be able to readily distinguish between formal and generally informal situations where language can be used appropriately. The children in the study were able to adapt their language to different types of informal situations, from intimate to casual to consultative, though the finer adjustment of language is probably at the subconscious level of usage.

Children speak in informal types of situations to a far greater extent than they do in formal situations. The children in this study were, in three out of four instances, decidedly ill-at-ease in the formal situation. But, despite their discomfort in the formal situation, these children adapted their language to the situation, as evidenced by the various means of analysis.

The provision of a variety of sociolinguistic situations through the awareness of different contexts of situation is a method which could be successfully used when designing language tasks for elementary school children. The educator would need to be aware of the factors which make up the context of situation, as discussed in Chapter 2. The provision to use language in a variety of sociolinguistic situations can aid in the child's development of a repertoire of role-relations which are essential for his successful adaption to different situations. The essential codevelopment of language and social man has been theoretically developed in Chapter 2, and some educational implications become clear here.

The provision for children to practise their language development in different situations can help the child to develop a comfortable level of participation in those more formal situations where he might otherwise tend to avoid participation. The provision of a variety of task situations can also lead the child to see that the school is involved with his total development as opposed to a singular academic/formal development. The institutional nature of the school can be brought into closer contact with the social nature of the child's larger world.

The provision of a range of sociolinguistic situations for children to practise their language can help in the child's development of an awareness of sociolinguistic settings and his role in them. This need not be, and indeed should not be, at the explicit awareness level, but should be regarded as a developmental process.

QUESTION 3

> Are the measures of lexical diversity and lexical density capable of evaluating and differentiating the situational language uses of children in the study?

The measure of lexical diversity using the type-token ratio did not prove to be a useful measure in convincingly differentiating the situational uses of language in the study. To conclude that the measure is not a valid one for evaluating register would be to overgeneralize. Given a distinct subject matter to be pursued in all situations, respondents might produce differences across situations which would display a trend.

The measure of lexical density has been found to be a valuable register differentiator in other studies and its use in such research is reaffirmed in this study. The trend was towards an increase in lexical density from the casual situation to the formal situation. The lexical density analysis was able to differentiate the four levels of informality-formality while most analyses primarily differentiated formal from informal.

A subanalysis of lexical content words further affirmed the effectiveness of the measure in differentiating sociolinguistic situations. The use of nouns showed a consistent increase across task situations from the intimate situation to the formal situation. The lexical density measure is the single most useful measure used in the study, and the results suggest that norms might be established for ratios of lexical density at different levels of informality-formality.

QUESTION 4

> Is an analysis of abbreviated language forms capable of evaluating and differentiating the situational language uses of children in the study?

There were two types of analysis which were applied to abbreviated language forms. One analysis studied what were defined as contractions, compactions and truncations, while the other type looked at the standard and colloquial uses of "Yes." The analysis of contractions, compactions and truncations proved useful in this study. It was found that the use of contractions increased as the level of formality moved to formal, and this tendency worked in reverse for the use of less-acceptable compactions and truncations. It appeared that the children in this study were intuitively able to adapt their use of these abbreviated forms to the task situation. A definite trend was apparent with the use of contractions, and this abbreviated form alone is a valuable register measure.

The analysis of the standard and colloquial forms of "Yes" was not as fine a measure as the above, but it did serve to differentiate the formal situation. The use of the standard form was minimal in all task situations, suggesting that it was not seen by the children in the study as a standard form. The analysis of the "colloquial" form only is most promising. Analyses of other informal forms is also suggested as a means for differentiating situational language usage.

QUESTION 5

> Is feedback of both a linguistic and a nonlinguistic nature capable of evaluating and differentiating the situational language uses of children in the study?

The analysis of linguistic dominance provided a broad measure of feedback of a linguistic nature in different task situations. The measure of linguistic dominance is considered a useful one in differentiating task situations as found in this study. However, although it is possible to predict by probability distribution the degree of linguistic participation per subject in a sociolinguistic situation, this assumes a prior knowledge of the context of situation. Judging the type of sociolinguistic situation from the linguistic dominance data of only one subject can be misleading. The analysis of linguistic dominance provides a useful measure for evaluating the degree of dominance and subdominance of group members, and is also linked with features of the subject matter that the group chooses to discuss.

The study of nonlinguistic features of communication and feedback is also a valuable means of differentiation, but in a more general way. Individual behavioural characteristics of the children in the study were prominent, though in different task situations certain types of nonlinguistic features were emphasized and others de-emphasized. One of these features was eye contact, which played a dominant part in the situational aspect of the intimate task situation but declined over levels of increasing formality. Nonlinguistic features carry much of the total meaning in the intimate situation, and as the situation becomes increasingly formal the conveyance of meaning falls more heavily on linguistic utterance.

Nonlinguistic features of communication and feedback are highly problematic when it comes to quantification and comparative analysis. It might do more justice to this type of data to report it descriptively, relying on a well-validated system of classification. Such treatment renders the analysis no less defensible than quantifiable analyses as a measure of register differentiation.

QUESTION 6

> Are syntactic measures capable of evaluating and differentiating the situational language uses of children in the study?

The syntactic measures used in this study were an analysis of C-units, elaboration of C-units, and a lexical verb analysis. Subanalyses of C-unit elaboration included breaking down C-units to count the use of clauses and prepositional phrases. The C-unit measure did not act as a definite differentiator between the task situations, although trends were apparent which suggest that as the situation becomes more formal the mean C-unit length increases. At the present time, and given the results and limitations of this study, the investigator concludes that the measure of mean C-unit length is a promising one for evaluating differences between different language situations.

The second syntactic measure was that of elaboration (clauses and prepositional phrases) of C-units. It was found that the measure of average number of dependent clauses per C-unit differentiated the formal task situation. The measure of percentage of words in dependent clauses in relation to words in C-units also differentiated the formal task situation. In three measures involving clauses, the formal situation was differentiated and the other three showed similarities. This same tendency to separate the formal situation from the other three situations was true also for the prepositional phrase measure. Therefore, the syntactic measures of C-unit elaboration differentiated only between the formal and less formal task situations.

The analysis of lexical verbs, like the other verb analysis of lexical content words, provided no evidence from which trends could be predicted across task situations or between situations. In the light of the lack of differentiatory power in two types of verb analysis, this investigator concludes that syntactic measures of verbs may not be useful in differentiating sociolinguistic situations. The analysis of verbs requires further research.

QUESTION 7

> Is the study of extraneous linguistic material capable of evaluating and differentiating the situational language uses of children in the study?

Of the four types of extraneous linguistic material (ELM) identified, the two that showed distinct trends when analyzed were audible pauses and edit mazes. Of the measures that treated all ELM types together, the one that proved most valuable was that which showed ELM occurrences as a percentage of C-units. Of combined ELM, the general tendency shown was for an increase across situations from casual to formal after a decrease between intimate and casual. This measure differentiated the dominant and subdominant speakers, with dominant speakers showing a steady increase across all situations.

In the case of audible pauses, the tendency revealed was one where there was a decline across task situations. With edit mazes there was significant tendency for use to increase substantially in the formal task situation. Thus, this measure functioned to differentiate the formal situation, but not to differentiate between the other three less formal situations.

The study of extraneous linguistic material or mazes or language tangles is a useful measure for the differentiation of situational language use. Some breakdown of such material is necessary in order to note trends that might not be visible when the material is analyzed as a whole. The difficulty of transcribing ELM is worthy of note, and phonological symbols might be used to advantage in such research.

QUESTION 8

> Is the situational categorization a valuable method for describing the sociolinguistic setting of the children in the study, and are there implications for elementary language arts instruction?

The situational categorization was developed from the literature and is described in Chapter 4. It was developed in order to account for the many factors, both sociological and linguistic, which make up the sociolinguistic situation in which speakers operate in the world of communication. Monologue, it might be argued, is a notable exception; this investigator would argue that the monologist is involved in a communicative act, even if it is with himself. Children are involved in the same types of communicative acts as are adults.

With the children in the study, and indeed with all children, the opportunity to become involved in a wide range of sociolinguistic situations occurs daily and sometimes with great rapidity. In a typical school day, the physical movement from classroom to playground to home to sports events brings with it changes in the sociolinguistic situation. If researchers are to be able to describe these situations, then a system of categorization is necessary. The context of situation enables the researcher to record these sociolinguistic settings. More important, it also enables him to work backwards and create sociolinguistic situations by which means he has an environment in which he can study language.

For the language researcher it is not always possible to go into the field to collect language samples. The mobility of human beings often makes language collecting technically impossible. The creation of environments, on the basis of validated contexts of situation, is a defensible means of collecting usable language samples.

The educational implications for language arts instruction lie in the fact that the situational categorization provides the educator with the factors involved in sociolinguistic situations. It has been possible in this study to group the analyses on the basis of their foci in the context of situation. Thus, the main components were subject matter, nonlinguistic features, vocabulary features, grammatical features, linguistic dominance features, and extraneous linguistic material features (which are actually part of the grammatical features).

The educator who wishes to develop certain linguistic features may be able to provide the most appropriate situation by manipulating certain factors of the context of situation. For example, if syntactic development is of interest to the educator, then he might plan a formal situation, since the study showed that mean C-unit length was greatest in the formal situation. Likewise, the exploration of certain subject matter can be undertaken in certain linguistic situations which can be built up from the situational categories described. Educational implications are made more explicit in the following parts of this chapter.

QUESTION 9

> Is the methodology employed in the study a fruitful one for a sociolinguistic description of children's language, and could it be further employed in describing the possible repertoires of children's speech styles?

The methodology developed for and employed in this study proved useful in providing a sociolinguistic description of children's language. It allowed for a wide variety of factors to be present and to act as variables in the study, and as such made provision for the employment of a wide range of analyses. This, in turn, led to a broad description of not only the language samples, but also the sociolinguistic setting which influenced the language sample.

The methodology was also fruitful in that it allowed for the partial case study or indepth approach to a research problem while still allowing the data to be pooled for the majority of the analyses. The advantage of pooled data is that not only can comparisons be made to a degree between individual language samples and the pooled data, but it also provides some evidence for the possible presence of language norms. This evidence can be surveyed in future research.

The avenues for further research using this type of methodology, that is, the context of situation to develop language tasks and situations, are many. It is not possible to provide for or to analyze all of the factors present in the context of situation, and many studies could focus on different sociolinguistic factors present in the context of situation.

This study has shown that the formal language situation can be definitely differentiated using a wide variety of analyses. It has also shown that there are some analyses with finer differentiatory powers which can also separate less formal language situations, which in this study were the intimate, casual and consultative. Possible repertoires of children's speech styles are suggested by the study, and the methodology can be applied and adapted to study these in different school environments, and in settings other than the institutional one of the school.

IMPLICATIONS FOR EDUCATION AND FURTHER RESEARCH

It will prove more appropriate to discuss these two issues together because in many respects the implications for one provide inspiration for the other. Such an approach also allows the discussion to follow the order of analysis, the reporting and discussing of the data, the answering of the research questions, and the ensuing conclusions. The subheadings used in this section will be of this type.

SUBJECT MATTER: IMPLICATIONS FOR EDUCATION AND FOR FURTHER RESEARCH

Formal situations were found to be preferable for the exploration and exposition of a single subject topic. This was true when the topic was selected by the speaker and was of personal interest. An intimate situation proved best for exploring past experiences and for reminiscing. There was a diverse range of topics explored in informal situations.

The more formal the situation the more a subject topic is maintained. This might mean sustaining the subject topic or returning to it on several occasions throughout the communicative event. For planning experiences the consultative situation seems to function well. Where there is no shared experiential base children will tend to proffer personal experiences as a way of illustrating points and of making a sociolinguistic contribution. The exploration of past experiences, particularly of a shared nature, works well in informal situations such as the intimate and casual. Here past experiences will even form the basis for the planning of future events.

In planning for the language development of children there is need to provide opportunities for a range of experiential bases from which children can draw, and which go from personal to shared, and from past to present to future. If this is the aim of the educator, it might well be achieved through the establishing of situations which range from intimate through formal. The types of relationships that hold between experiential bases and levels of formality have been described.

Leadership qualities also appear in the casual and particularly the consultative situations. Dominant persons will often control to some extent the subject matter and the maintenance of subject matter, as well as the occurrence and function of humorous incidents. Taking turns in leading consultative groups could do much to develop leadership qualities. One would need to ensure that the skills which allow for domination are not being inculcated. The consultative situation is the one descriptive of the committee meeting or club meeting, and such a sociolinguistic setting works well in the elementary school.

Planning activities are very suitable in the casual and consultative situations. Planning for events of a social nature can be effectively carried through in a casual situation, where past shared experiences can be brought to bear. Planning for more formalized events can be carried out in the consultative situation, where a subject topic/can be maintained for a long period of time because there are more people to contribute more ideas. Ideas are also more diverse because of a restricted shared experience base in the consultative situation.

There needs to be further investigation into the length of subject maintenance. In this study it was found that 15 to 17 minutes seemed sufficiently long to maintain the subject matter in the consultative situation, while the formal situation was shorter. How these time spans for subject maintenance vary with different subject matter is also a worthy topic for further research. Experimental studies might research the effect of practice in and exposure to different sociolinguistic situations, with pre and post measures being adopted for subject maintenance.

Teachers also need to be aware of the different lengths of time that the various language situations can be expected to sustain pupil interest. The intimate situation will very likely sustain interest for the longest time, the formal situation the shortest.

NONLINGUISTIC FEATURES OF COMMUNICATION: EDUCATIONAL IMPLICATIONS

Nonlinguistic features of communication are not really taught in our schools. They are learned patterns of behaviour which become deeply ingrained personality attributes and traits. It could well be argued that individuals develop those features of nonlinguistic communication which best complement and fit their personality characteristics.

However, it is appropriate in the study of language and communication to be aware of the presence and function of nonlinguistic features, not just for the purpose of consciously controlling them, but to be able to recognize their use and appropriateness. To be attuned to the use of nonlinguistic features makes for a more discriminating listener and a more sensitive user of language.

Utilizing a range of speech situations as was used in this study can allow children to begin to become aware of the nonlinguistic features of language. Children can act as both participants in task situations as well as observers of the same situations, and valuable insight into language use can be gained through discussion from both perspectives, that is, the user and the observer.

Children need to be effective in formal situations, and the need for this effectiveness is certainly a longterm one. The analysis of Task 4 showed that all nonlinguistic features were used sparingly, and that the linguistic utterances carried the meaning of the communicative situation almost totally. Maybe the absence of audience nonlinguistic feedback causes the discomfort of speakers. We should very likely be making children aware of their need to be responsive to audience members. The development of appropriate nonlinguistic features in formal situations is a very effective means to ensure a more attentive and involved audience. The importance of eye contact, eyebrow movement and facial expression can be stressed and developed, possibly through drama as part of the language arts.

There is no need to stress that the formal situation is only one of at least four sociolinguistic situations in which children and adults need to operate. Stressing the formal situation disproportionately to others is doing a disservice to the social preparation of the child. In terms of the amount of time we daily spend in sociolinguistic situations, the casual and consultative are featured, and the intimate for most of us is very relevant. For children the intimate and casual situations probably dominate. The formal situation is a very minor one in terms of allocation of the child's time. As regards effectiveness, however, it is very important. Therefore, we need to make children proficient in that situation, without giving unrealistic attention to it in terms of provision of time.

ABBREVIATED LANGUAGE FORMS: IMPLICATIONS FOR RESEARCH

The analysis of the standard and colloquial forms of "Yes," as one measure of distinguishing vocabulary items, points to a very important issue in the study of children's language. That issue concerns the norms that researchers apply to language usage. In some studies of children's language the researcher has to make a decision as to what constitutes either standard or nonstandard usage, colloquial or formal usage, or acceptable and unacceptable usage. The researcher in many instances must establish his own norms. The norms that he will likely establish will be based on his experience with the way child or adult speakers use the language. Such norms will not necessarily be appropriate to the analysis of children's language.

This problem confronted the investigator in this study. In the analysis of the colloquial and standard use of "Yes" it was found that either the children see the colloquial form as more standard than colloquial, or else the standard usage has broadened to include what might have been until recent times considered colloquial usage. The latter explanation is quite likely a contemporary trend, where there is noticeable movement toward the less formal use of spoken language in the mass media, this being a prevalent source of language usage for children.

LEXICAL ITEMS: IMPLICATIONS FOR RESEARCH AND EDUCATION

The lexical density measure proved useful in differentiating speech situations marked by levels of formality. At least equally useful as differentiating measures were the two ratios computed for nouns to lexical content words and nouns to all words used. This has implications for further research into the speech styles used by children. In several instances, particularly noticeable when graphed, the ratios for lexical density, nouns to lexical content words and nouns to all words showed groupings which suggest that norms could be established. Further research, with data collected from a large number and wide range of subjects, could substantiate norms. Such norms for different groups of children might make a useful lexical measure for differentiating competent and less competent users of language in different speech situations.

The instructional implications of these findings are of much interest. First, it is clear in this study that the use of content words (nouns, adjectives, verbs, adverbs) increased with more formal speech situations. In conjunction with this finding, the number of nouns used also increased. Since content words carry information, more formal situations would seem to be more appropriate for the transfer of information. However, it would be misleading to conclude that for the transmission of information the most formal situation is to be preferred. It was seen that in the formal situation feedback was minimized and linguistic dominance maximized, so that the transmission of information in the formal situation is very much unilateral. Therefore, in situations where information needs to be transferred in a shared or multilateral manner the consultative situation is preferable.

Second, it seemed that the girls in this study were in general better able to cope with the formal situations than were the boys. The investigator is aware of the danger of concluding that boys of the same age and/or grade level are less competent than girls in their use of language. This sociolinguistic approach, however, does allow observations to be made about the social competence of boys in sociolinguistic settings. Perhaps, boys in the elementary grades need the exposure to, and guidance in, sociolinguistic situations. The discomfort displayed by the two boys in the formal situation has already been noted, along with their attempts to inject informal features into the situation and into their language. Further research needs to be undertaken to determine if this lack of social competence is extensive among boys at the elementary school level.

GRAMMATICAL FEATURES

a. C-unit Analysis: Implications for Research

The measure of mean C-unit length may be a promising one for determining differences between language situations. The present research showed a definite tendency for mean C-unit length to increase as the situation went from informal to formal. In formal situations the mean was highest, in the intimate situation it was lowest. Further research needs to be undertaken which could validate this tendency. However, sampling procedures will likely play a major role in such research.

It has been pointed out in Chapter 5 that reticent and shy subjects in certain task situations will produce very small language samples which will produce C-unit mean lengths that are probably quite unreliable as language measures. Personality characteristics play a large role. Although subjects may produce equal quantities of language along with the other speaker in the intimate situation, they become passive language contributors in situations where more speakers, and especially relative strangers as in the consultative situation, are present. In the formal situation, where they are the sole person responsible for speaking, they produce again the expected quantity of language. The linguistic dominance analysis underscored these observations.

On the other hand, M. and C., the dominant speakers, produced much more consistent (that is, what might be expected from probability distribution) language samples over the four task situations, and both their mean C-unit length scores showed consistent trends over the task situations. The researcher of children's speech styles needs to be aware of the differential linguistic contributions of children in a range of sociolinguistic situations. In order to initially isolate and validate measures of register differentiation, it might be preferable to first conduct studies with children whose linguistic contributions are likely to be large enough in certain situations for reliable analysis. Such children are likely to be leaders or persons with an established status in peer situations. M. is a definite leader but not in an obtrusive manner, that is, she did not dominate or control situations. C. is likewise a leader but is dominant, which is not uncommon in a boys' peer group. His remarks often tended to control the situation, especially among peers who were friends of the same sex.

There is yet another important implication for language research. Often when language samples are taken, especially of oral language, measures are applied and means established which then become measuring sticks by which the language of other children of the age or grade level are compared. These measures are validated, through research that adopts similar sampling procedures, and the means come to be considered as norms. The present research has shown that means of children's oral language may be restrictive in what they report. Oral language collected in situations where an adult investigator is in conversation with a child, especially on an individual basis, will likely produce quite different results when compared with those of the same child speaking with peers.

What is needed is research which measures the oral language of children in different language situations which proceed from intimate through casual, consultative and formal. Much research in the area of children's oral language has collected samples which are representative of the formal style of speech, which in many classrooms may still be the norm of expected use of oral language. But this represents a very restrictive approach to the study of children's language, and bases judgments of children's language use on samples collected at only one end of the situational spectrum. Studies are needed which sample all the way along the continuum, from informal to formal.

b. Other Syntactic Measures: Implications for Research and Education

More research needs to be undertaken which uses various syntactic measures to differentiate speech styles. As was found in this research the various syntactic measures were able only to differentiate the formal situation, and to a much lesser extent the opposite end of the formality scale, the intimate situation. In order to utilize a variety of syntactic measures, especially finer ones such as clause type, it is necessary to have a fairly large oral language sample. Even with a large sample it may be found that little actual material remains for analysis after all extraneous linguistic material has been removed. It is possible to analyze extraneous linguistic material, particularly edit mazes, by syntactic means, but it is doubtful if the results would warrant the considerable amount of time that would need to be invested.

The second important consideration is the need for consistency of sample sizes in different speech situations. Because of the essential differences in linguistic dominance from one situation to another, it may be necessary to run a Task 2 and 3 type situation for much longer periods of time in order to arrive at comparable sample lengths across situations. In this study the time period of 15 to 17 minutes for sixth grade children was found to be optimal. However, future studies might use several such sessions to collect sufficient data. The need for careful selection of subjects is also crucial, particularly in the beginning stages of speech style research with children.

The educational implications of these findings can only be minimal at the present time, until further research with syntactic measures of oral language styles is undertaken. However, it is clear that the provision of formal situations in which sixth grade children can speak allows them to choose more elaborated syntactic forms, and to pay heed to their use of syntax. But it was also found in the elaboration measures that the intimate speech situation allowed, in a number of instances, for syntactic elaboration second only to the formal situation. The intimate situation allowed speakers greater opportunity to speak in a dialogue or group situation than did any other task situation. It therefore gave the opportunity for utterances which could be more lengthy because there were fewer restrictions on awaiting turns to speak.

The importance of the intimate situation cannot be overlooked. In the classroom setting the intimate situation can be adapted to a paired situation, which might bring known children together rather than intimate friends. Because of the demands on taking turns and contributing in the intimate or paired situation, it is an excellent means of developing sociolinguistic facility with reticent and shy children. It gives the added advantage of also allowing for a relatively high level of syntactic usage in an oral language situation without the nervousness attendant in the formal situation.

c. Verbs: Implications for Research

Two different approaches to the analysis of verbs have been used, neither of which provided information from which trends or patterns could be inferred. It would appear that the analysis of verbs can do little for the investigator wishing to study the speech styles of children, at least at the sixth grade level. However, it would also appear that the use of a range of verbs is related to the types of utterances children produce, so that in larger groups, as the consultative situation provided, where there were many terse and unfinished utterances, the type-token ratio was consistently low denoting a smaller range of verbs.

An analysis of verbs in speech style research may be an inefficient use of the researcher's time. Verbs appear in even minimal utterances, being lexical content items, so that even in language samples that are highly constrained by the sociolinguistic setting, as in the consultative situation, they will still be very much present. The only change that verbs seem to undergo in such conditions is that their range is restricted, so that certain verbs are used over again. In sociolinguistic situations where the opportunity to speak is less constrained, it appears that the speaker uses a wider range of verbs.

LINGUISTIC DOMINANCE: IMPLICATIONS FOR RESEARCH AND EDUCATION

The principles of linguistic dominance are important in the formation of groups of children for language activities in the elementary school classroom. Certain personality characteristics which are associated with children who are leaders are evident also in their linguistic behaviour. The child who is perceived as a leader and respected by his peers for his opinions and personal qualities need not necessarily be linguistically dominant above what one would expect in certain language situations. Such was the case of M. in this study. This may be true for girls at the elementary school level and not so generalizable for boys.

It can be inferred from the study that the boy perceived as leader among his peers may be dominant in many areas of child activity and behaviour, including language. Therefore the boy, in a group which consists primarily of boys, who assumes the leadership role, will be linguistically dominant and will tend to steer the subject matter towards his interests and hobbies. The other boys in the group will exude interest in these subject topics because they are common grounds for group membership and cohesion.

In the ~~formation~~ of groups of children in the classroom for language activities the teacher needs to be aware of these psychological and sociolinguistic principles. A linguistically dominant child in a group will change the characteristics of that situation and the teacher's aims and purposes of the language activity may be aborted. The teacher needs to be aware that the formation of a group represents the formation of a language situation where a particular speech style is considered appropriate. The leader of such a language situation will need to be a person who is not linguistically superdominant to the detriment of other speakers' opportunities to contribute. A judicious combination of the sexes might be called for.

It is also important to select subject matter which is appropriate to the group composition and to the speech style which the situation will elicit. Along with this awareness is also the need to consider the principle of subject maintenance and switching. The more formal the task situation was the greater was the degree of subject maintenance, that is, the longer the group will focus on the particular subject matter rather than allow the discourse to become desultory.

It was noticeable to the investigator that in the formal situation the subjects were generally unable to successfully bring closure to their presentations. Nervousness resulted in a lack of coherence to the presentations, and children need to be made aware of the need to successfully conclude a conversation or presentation, and they need to be made aware of various methods of achieving satisfactory closure.

CONCLUDING STATEMENT

The methodology developed and used in this study has shown to be a useful way of describing and researching children's language use in a variety of situations. The interlinking of sociolinguistics with child language development can bring a new focus to the study of children's language, and can suggest further directions for curriculum development of language arts programs. The results of many of the analyses employed suggest that they are useful measures which differentiate language use in different sociolinguistic situations, and the directions for further research into the sociolinguistic behaviour of children are many.

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APPENDICES

APPENDIX A

LETTER TO PARENTS

______ ______ ELEMENTARY SCHOOL

106 ________ ____

________ ____, Alberta

January 6, 1978

Dear Mr. and Mrs. ______________________:

During the two weeks beginning January 9th, I will be working with some pupils in Miss ________'s class as part of a study of children's speech styles. I have asked Miss ________ to identify a pair of girls and a pair of boys who are very close friends. Beginning with each pair I plan to add other children to change the degree of formality of the group, and tape record and videotape the children conversing. I'll be asking the children to talk about sports, games, hobbies or special interests.

Miss ________ chose your son/daughter ________ as one of the children who would be a good subject. I have found in an earlier study that the children are really enthused, especially with being videotaped. There is no preparation or study involved, except for the last task which asks ________ to give an oral presentation to a group of twelve children from his/her class. ________ will only be out of his regular classroom for about 30 minutes on each of three days (January 11, 12, 13) and for about one hour on January 18, so there is minimal disruption with his/her regular studies.

I hope you will agree to ________'s participation in the study. If you have any questions, or would like additional information, please leave a message for me at the school and I will contact you. I'll be at the school all day January 9 to 13.

Yours truly,

(Mr.) Trevor Gambell
Dept. of Elementary Education
University of Alberta

Mr. Gambell has the approval of the County for this project. The school is willing to co-operate and we trust that you will give us your approval. Please contact us if further information is required, or if you wish your child to not participate.

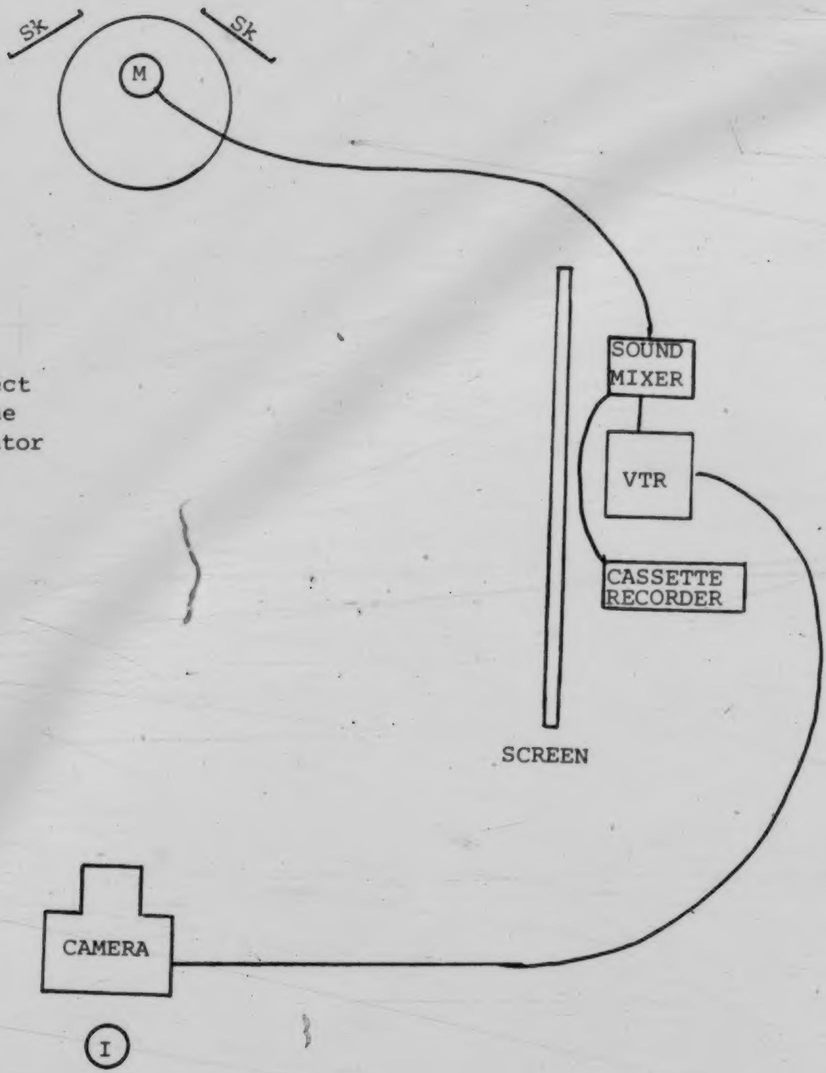
Yours truly

_. _. ________
Principal

APPENDIX B

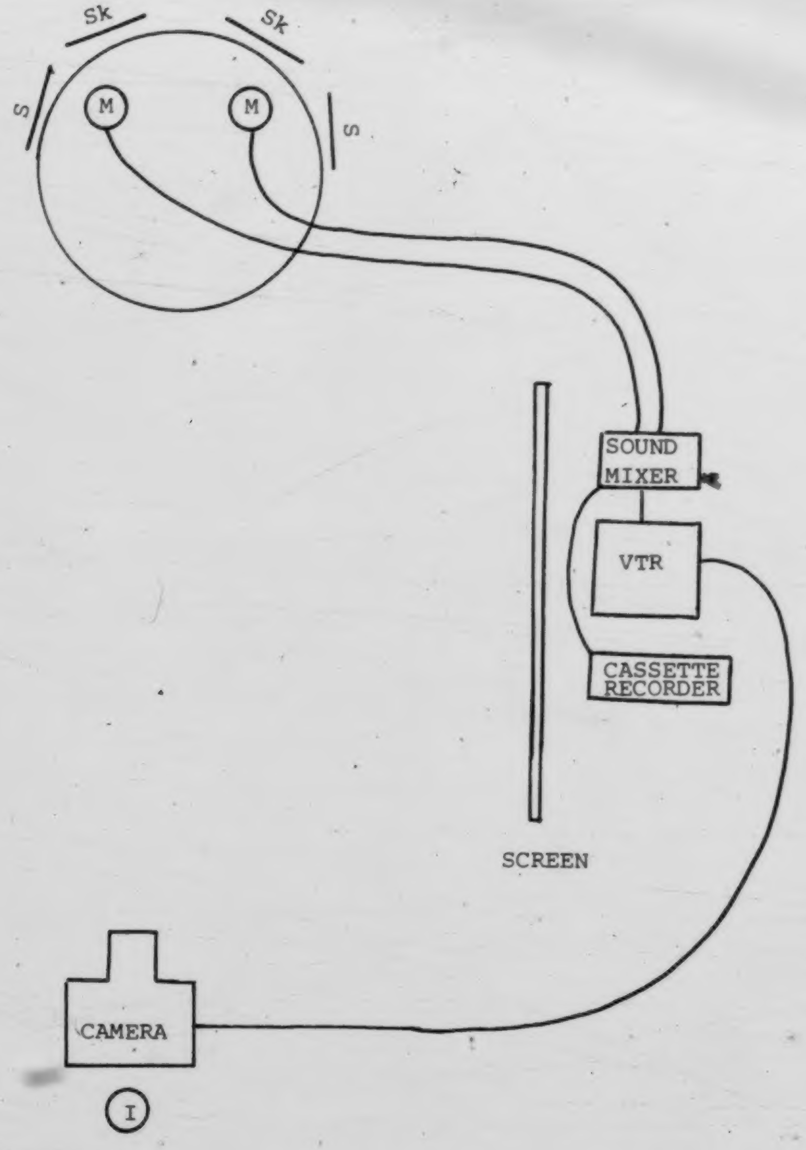
TECHNICAL ASPECTS OF SITUATIONAL LANGUAGE RECORDING AND SEATING ARRANGEMENTS FOR SUBJECTS

TASK 1


Sk
Sk
M
SOUND MIXER
VTR
CASSETTE RECORDER
SCREEN
CAMERA
I

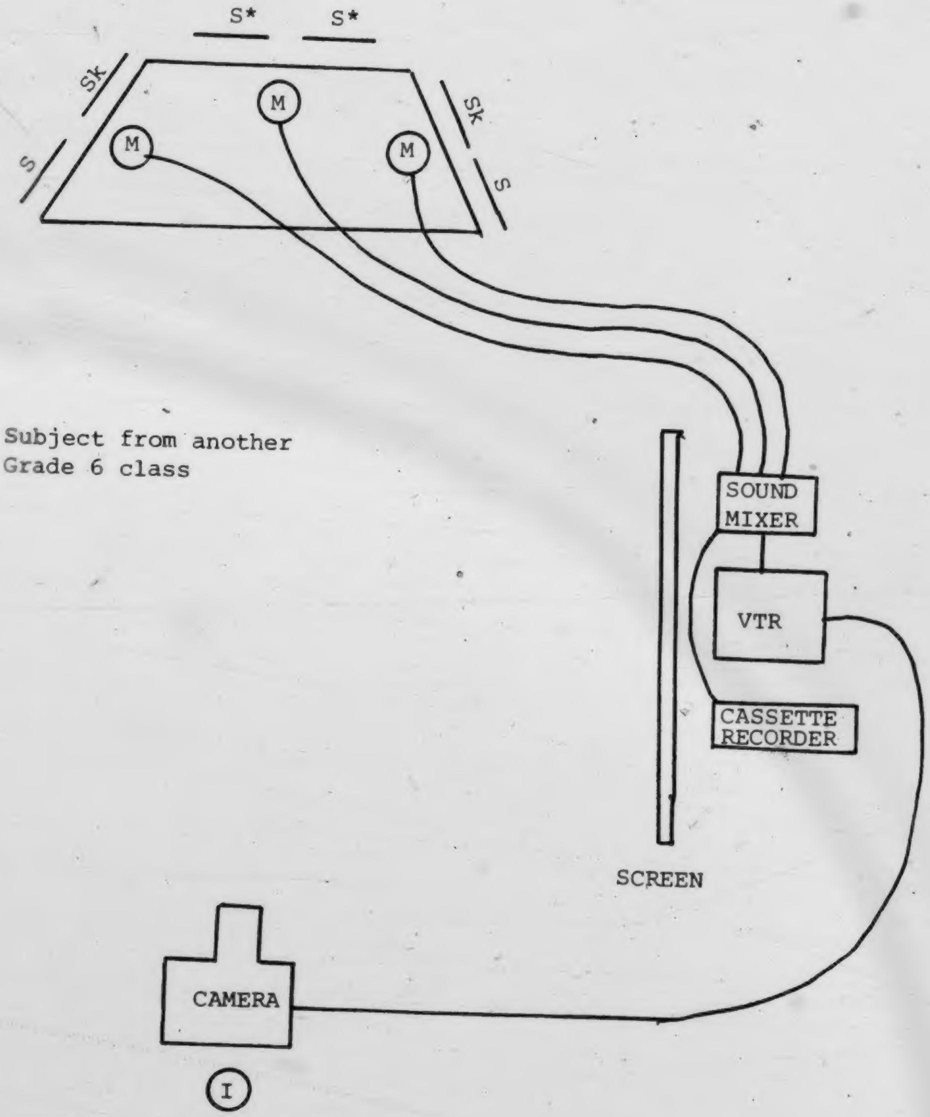
Sk = Key subject
M = Microphone
I = Investigator

TASK 2


Sk
Sk
S
S
M
M
SOUND MIXER
VTR
CASSETTE RECORDER
SCREEN
CAMERA
I

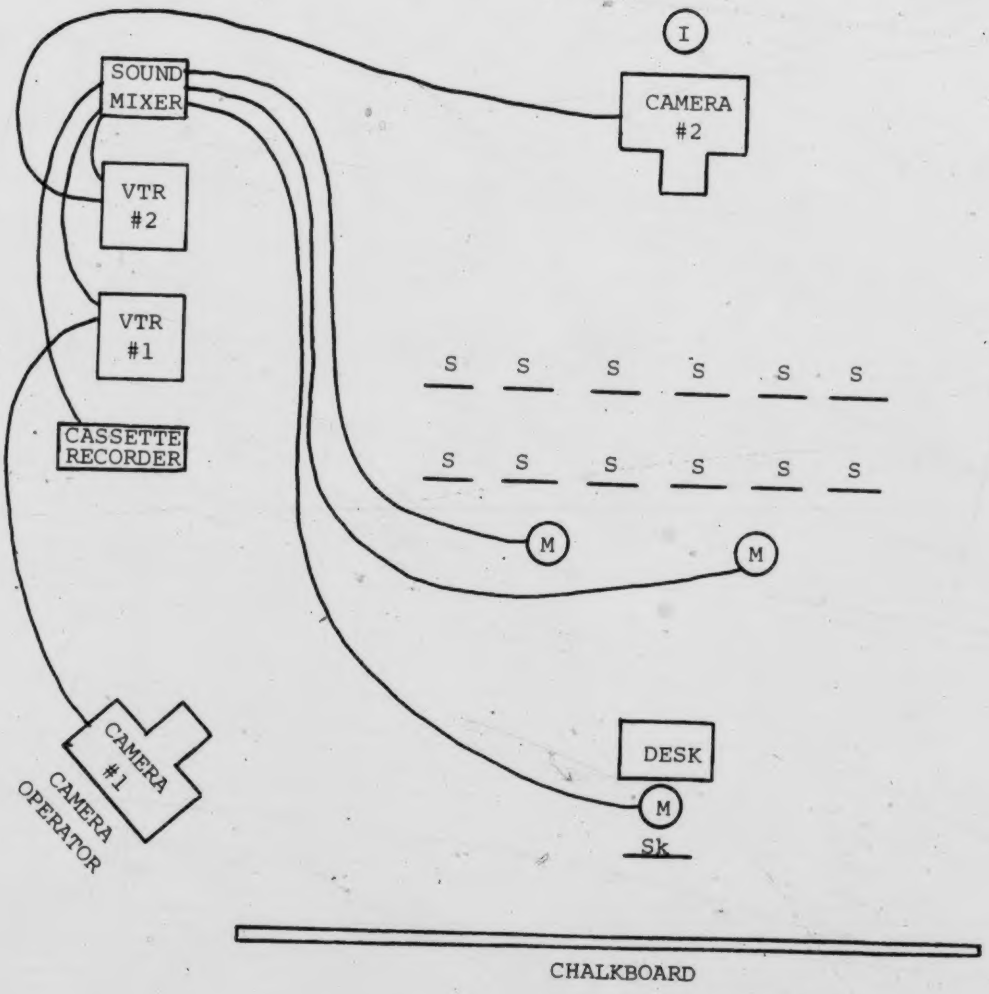
S = Subject

TASK 3


S*
S*
Sk
S
Sk
S
M
M
M
SOUND MIXER
VTR
CASSETTE RECORDER
SCREEN
CAMERA
I

S* = Subject from another
Grade 6 class

TASK 4


I
SOUND MIXER
CAMERA #2
VTR #2
VTR #1
CASSETTE RECORDER
S S S S S S
S S S S S S
M
M
CAMERA #1
CAMERA OPERATOR
DESK
M
Sk
CHALKBOARD

APPENDIX C

SUBJECT MATTER ANALYSIS DATA

SUBJECT MATTER MAINTENANCE AND SWITCHING

SUBJECT MATTER MAINTENANCE AND SWITCHING

The subject matter is recorded in order of occurrence, and the number of subject topic items gives a count for subject switching. It will be remembered that the first three tasks were all of the same approximate length of time. The actual listings of subjects and experiential categories appear in this appendix. Each subject topic occurrence is identified with an experiential base, and the category system for this coding appears below.

The subject matter analysis was applied to the total text, that is, the transcribed language of all children, not merely the key subjects. Thus names appear at times which identify children other than key subjects. For discussion purposes subject topics are grouped, and so are experiential bases. The discussion in Chapter 5 is by task situation, and secondarily by group, and focuses on subject maintenance, subject switching, and experiential bases for subject topic choices.

Experiential Basis Categories

Shared (when two or more children contribute)

(a) Shared personal experience	(b) Shared school experience
Shared personal opinion	Shared school opinion
Shared personal feelings	
(c) Shared planning experience	(d) Shared humour

Self (when only one child contributes)

Individual experience

Another way to represent the experiential bases is by means of temporality.

Past

- Shared personal experience
- Shared school experience
- Individual experience

Present

- Shared personal opinion
- Shared personal feeling
- Shared school opinion
- Shared humour

Future

- Shared planning experience

SUBJECT MATTER ANALYSIS

Subject Matter Maintenance and Switching

TASK 1: Group 1 (M. and Ba.)

	Subject (in order of occurrence)	Experiential Category
1.	Tobogganing with mutual friends.	Shared personal experience.
2.	Michelle's birthday party.	"
3.	Charlotte's birthday party.	"
4.	Grade four.	Shared school experience.
5.	Pushing Tracey on swings.	"
6.	Lone Dog (game).	"
7.	Last year's Christmas party.	"
8.	Camping trip being planned.	Shared planning experience.
9.	Grade one.	Shared school experience.
10.	Being chased in playground today.	"
11.	David Reimer, previous classmate.	"
12.	Barbara's little friend Jasie.	Individual experience (Ba.).
13.	Grinning contest last year.	Shared school experience.
14.	Boys in class last year.	"
15.	Pulling chair from under Barbara in class.	"
16.	Tracey's written story.	"
17.	Michelle's written story.	"
18.	Class Christmas party.	"
19.	Michelle's birthday party.	Shared personal experience.
20.	Feeding Kelly.	Individual experience (M.).

21.	Farrah Fawcett-Majors game.	Shared personal experience.
22.	Michelle's birthday party.	"
23.	Farrah Fawcett-Majors game.	"
24.	Michelle's birthday party.	"
25.	Halloween.	Individual experiences (M. and Ba.).
26.	Riding bikes two summers ago.	Shared personal experience.
27.	Playing baseball last year.	"
28.	Chasing boys.	"
29.	Jumping on desks in class last year.	Shared school experience.
30.	Musical chairs in class last year.	"
31.	Michelle's birthday party.	Shared personal experience.

Group 2 (C. and By.)

1.	Anticipating a scout camp.	Shared planning experience.
2.	Making a chariot.	"
3.	Model rockets.	"
4.	Swimming.	Shared personal experience.
5.	Science fiction.	Shared personal opinions.
6.	Model rocketry.	Individual experience (By.).
7.	Movie Star Wars.	Shared personal feelings.
8.	Movie and book Silent Running.	Shared personal opinion.
9.	Model rockets.	Shared planning experience and Individual experiences.
10.	Scout camp.	Shared planning experience and Individual experiences.
11.	Delivering newspapers in winter.	Individual experience (C.).

12.	Recounting events last year.	Shared personal opinions.
13.	Favourite school subjects.	Shared school opinions.
14.	Science test.	Shared school experiences.
15.	TV show Candid Camera.	Shared personal experiences.
16.	Frankenstein the Second.	Shared personal opinion.
17.	Movie Andromeda Strain.	Shared personal experience.
18.	TV show Walking Tall.	"
19.	Andromeda Strain.	"
20.	Walking Tall.	"
21.	TV show Zorro.	"
22.	Grade four activities.	Shared school experiences.
23.	Last year's school outdoor education camp.	"
24.	Favourite TV shows.	Shared personal opinions.
25.	Model rockets.	Shared personal experience.

TASK 2: Group 1 (M. and Ba.)

	Subject (in order of occurrence)	Experiential Category
1.	Planning to go skiing this winter.	Shared planning experience.
2.	Model volcano.	Shared school experience.
3.	Charlotte.	"
4.	Boys in class last year.	"
5.	Play performed in class last year.	"
6.	Anticipating Greaser Days.	Shared planning experience.
7.	Anticipating Christmas party.	"
8.	Planning Greaser Days	"

9.	Wearing skirts.	Shared personal feelings.
10.	Greaser Days last year.	Shared school experience.
11.	Planning Greaser Days.	Shared planning experience.
12.	Squirting toothpaste.	Individual experience (Dwayne).
13.	Squirting toothpaste: humour.	Shared humour.
14.	Charlotte's birthday party.	Shared personal experiences.
15.	Farrah Fawcett: humour.	Shared humour.
16.	Star Wars.	Shared personal feelings.
17.	Commercials on TV.	Shared personal experiences and Shared personal feelings.
18.	Family pets: cat, dog.	Individual experience (Sarah, then Dwayne).
19.	Movie on TV.	Shared personal experience.
20.	Movie: The Godfather.	Shared personal experience and Shared personal feelings.
21.	Movie: Lady Kung-Fu	Individual experience (Dwayne).
22.	The Godfather.	Shared personal experiences and Shared personal feelings.
23.	Movie and book Jaws.	Individual experience (Dwayne).
24.	Dwayne's sister.	Individual experience (Dwayne).

Group 2 (C. and By.)

1.	Play with puppets.	Personal experience (Brent) and Shared personal experiences.
2.	Personal pets: dogs, cats.	Shared personal experiences and Shared personal opinions.
3.	Favourite games: Monopoly, Stock Ticker.	Shared personal experiences and Opinions.
4.	Game: Anti-Monopoly.	Individual experience (By.) and Shared planning experience.

5.	Games: Monopoly, Payday.	Shared personal experiences and Opinions. Individual experience (Brent).
6.	Favourite summer activities.	Shared personal opinions and Feelings.
7.	Stink bombs.	Shared personal experiences and Opinions.
8.	Scout camp last summer.	Individual experience (C.).
9.	Anticipation of scout camp.	Shared planning experience.
10.	Favourite science fiction shows.	Shared personal opinions and Shared personal experiences.
11.	Cary's cousin's models.	Individual experience (C.).
12.	Favourite activities.	Shared personal opinions.
13.	Joke shop.	Shared personal experiences.
14.	James' bike.	Individual experience (C.).
15.	Joke shop.	Shared personal experience and Shared personal opinions.
16.	Grouse hunting: humour.	Individual experience (C.).
17.	Hunting rabbits: humour.	Individual experience (Brent).
18.	Rabbit shooting: humour.	Individual experience (C.).

TASK 3: Group 1 (M. and Ba.)

	Subject (in order of occurrence)	Experiential Category
1.	Commonwealth Games planning.	Shared personal experience.
	a. Athletic events	
	b. Officials to help	
	c. Where to have events	
	d. Selling and distributing tickets	
	e. Drawcard sports personalities	

- f. Crests, pinions and buttons
- g. Team flags
- h. Prizes and trophies
- i. Individual and team competition
- j. Team captains
- k. Team trophies and individual medals
- l. Team tee-shirts
- m. Other schools competing
- n. Team and school clothing
- o. Team and individual trophies and medals
- p. Team and individual competition
- q. Registering for events
- r. Timetabling events
- s. Officials
- t. Food
- u. Athletic events
- v. Organizing equipment
- w. Medals for places
- x. Grade teams

Group 2 (C. and By.)

1. Commonwealth Games planning.	Shared planning experience.
a. Events	
b. Trophies: humorous	Shared humour.
c. Where to hold events	
d. Events	

e. Getting equipment	
f. Timetable	
g. Team and grade divisions	
h. Contests: humorous	Shared humour.
i. Division of teams	
j. Timetabling events	
k. Scoring and recording	
l. Medals, trophies and ribbons for winners	
m. Postgames celebration	
n. Team captains	
o. Food for celebration	
p. Money for Games	

TASK 4: Group 1 (M. and Ba.)

	Subject	Experiential Category
(a) M.	Boxer dogs.	Individual experiences and Shared personal experiences.
(b) Ba.	Badminton.	Individual experiences and Shared personal experiences.

Group 2 (C. and By.)

(a) C.	Model rocketry.	Individual experiences and Shared personal experiences.
(b) By.	Domestic shorthaired cats.	Individual experiences and Shared personal experiences.

APPENDIX D

NONLINGUISTIC FEATURES OF COMMUNICATION WITH EXAMPLES

NONLINGUISTIC FEATURES

In arriving at a system of analysis for nonlinguistic features of communication several problems became extant. First, one must inevitably isolate the nonlinguistic features from the transcribed oral language, and thus lose something of both. To arrive at examples for each of the categories presents another problem. Both linguistic and nonlinguistic features need to be provided, and to understand the context one really needs several previous pages of transcript to fully comprehend just one action or gesture.

With these limitations in mind the investigator will give examples where the various categories of analysis are salient in the transcripts. An entire volume of the transcripts, totalling 187 pages, has been prepared, and all references to examples are to that. Thus a reference to G1, T3, p.11 refers to Group 1 (with the girl dyad as the core), Task 3 (Consultative Situation), page eleven. The categories for analysis were drawn from all the data, and the examples are drawn from the entire data.

The investigator began with a count of each feature, with the functional and nonfunctional features identified, and all subcategories used. Several features might be used simultaneously, such as eye contact with hand gesture with facial expression, and so one instance might be recorded in three different ways. Counts of features by themselves can thus be misleading. Rather than distinct differences across tasks which can be securely attributed to task differences, it became evident that personality differences between key subjects were more salient and interesting. The categories developed for nonlinguistic features are descriptive of all tasks in this oral language study.

Description of Nonlinguistic Features of Communication with Examples

A. FUNCTIONAL FEATURES

Functional features fulfil a semantic function in that they add meaning to a linguistic utterance which is synchronous with the nonlinguistic feature, or they supply the total meaning when there is no linguistic utterance. Functional features form an integral part of the utterance or of the communication. They are an adjunct to, or a substitute for, words.

a. Positive Eye Contact

1. to engage the attention of a listener or listeners (e.g. G1, T3, p.1);
2. to display interest in a speaker's words (e.g. G1, T3, p.2);
3. to mutually agree about and recall/share an incident (e.g. G2, T1, p.8);
4. to seek confirmation of a statement or to confirm a statement; to elicit reaction (e.g. G2, T3, p.5);
5. to address a question to a listener (e.g. G2, T1, p.4);
6. to invite a listener's contribution or question (e.g. G2, T4b, p.10).

b. Negative Eye Contact (looking down or away)

1. when thinking of an incident; "Can't remember now—What?" (e.g. G2, T1, p.13);
2. when questioning the statement of a speaker (e.g. G2, T2, p.2);
3. when expressing surprise or disgust (e.g. "Oh well!");

4. to signify a characteristic such as innocence or disinterest or disengagement (e.g. G1, T2, p.8).

c. Eyebrow Movement (eyebrows raised or lowered)

   1. to display surprise (e.g. G2, T1, p.8);
   2. to display sudden and extraordinary interest (e.g. G1, T1, p.1);
   3. to question and/or disagree (e.g. G2, T1, p.23);
   4. to emphasize a word or point (e.g. G2, T1, pp.1,17);
   5. to seek agreement (e.g. G2, T1, p.5).

d. Facial Expression (other than eyes and eyebrows)

   1. to show distaste and displeasure where unpleasantness enters into the conversation (e.g. G1, T2, p.25);
   2. to articulate words quoted from another person; exaggerated lip movements, and mouthed words (e.g. G1, T2, p.16);
   3. to mimic expressions used by other people, or even of animals (e.g. G1, T2, p.20);
   4. to question a statement (frowning), and to express uncertainty (e.g. G2, T2, p.18);
   5. to show enthusiasm or excitement, even surprise; to show sudden understanding (e.g. G1, T2, p.28);
   6. to show disapproval (e.g. G2, T1, p.13);
   7. when thinking deeply (frowning) (e.g. G2, T1, p.13);
   8. to signify "I don't know," equivalent to shrugging of shoulders (e.g. G2, T1, p.18);
   9. to show concern (e.g. G2, T2, p.22);
   10. to denote seriousness or graveness (e.g. G2, T3, p.2).

e. Gestures with Hands and Arms to Signify Objects and Incidents

   1. type of (e.g. G1, T3, p.15; G1, T3, p.16);
   2. size of (e.g. G2, T2, p.14);
   3. shape of (e.g. G1, T2, p.4);

4. movement of (plane of movement, speed of movement, type of movement) (e.g. G2, T2, p.26);
5. direction of movement (up, down, forwards, backwards) (e.g. G1, T1, p.2);
6. counting off objects or incidents as named (e.g. G1, T3, p.2; G1, T3, p.6);
7. location of, direction of (e.g. G1, T2, p.10; G1, T3, p.6);
8. manipulating and using object (e.g. gesturing using key to unlock a door);
9. outlining incidents by "drawing" with finger(s) on table (e.g. G2, T2, p.8);
10. holding up objects for display (e.g. T4 tasks).

Often the gesture replaces or is a substitute for a word. Sometimes the gesture is used and the word cannot be brought to mind. In such cases the listener will usually supply the word suggested by the gesture.

f. Gestures with Head Movement

1. nodding for a "yes" or "no" (agreeing or disagreeing) (e.g. G1, T2, p.24);
2. to functionalize or dramatize, when often the action substitutes for words (e.g. G1, T1, p.4);
3. when in thought, pensive (head lowered or raised toward ceiling) (e.g. G2, T3, p.11);
4. when sudden thought occurs; sudden agreement or disagreement (toss of head back) (e.g. G1, T3, p.27);
5. nodding to indicate direction (e.g. G1, T3, p.24);
6. to count off objects or repeated words, by a nod of the head for each (e.g. G2, T3, p.21; G2, T2, p.24);
7. nodding head to a listener to indicate recognition to speak (e.g. G2, T4a, p.4).

g. Gestures to Suggest Movement and Actions of People

   1. demonstrate type of movement (crawling, walking, running) (e.g. G1, T2, p.17);

   2. demonstrate direction of movement (up, down, rising, falling, backwards, forwards, entering, leaving) (e.g. G1, T2, p.24);

   3. to count off people or the actions of people (e.g. G1, T1, pp.14,24);

   4. to mimic another person and/or his actions (e.g. G1, T2, p.27).

h. Gestures to Gain the Attention of Others in the Group

   1. to invite a listener to recall a shared experience ("Remember when?");

   2. to add new information to a current topic or incident;

   3. to introduce a new topic (e.g. G2, T1, p.2) or to close a topic (e.g. G2, T4a, p.4);

   4. to emphasize a point or to display excitement (e.g. G1, T3, p.18);

   5. to seek agreement (e.g. G1, T3, p.18);

   6. to interject in order to speak (e.g. tapping fingers on table, waving arm in air);

   7. to recall a piece of information (e.g. by clicking fingers together);

   8. to include or embrace a listener in a friendly, even intimate way (e.g. G1, T1, p.14).

i. Torso Gestures

   1. shrugging of shoulders

      i. to defend one's words when challenged (e.g. G1, T1, p.12);

      ii. to ask a question, which is often rhetorical (e.g. G1, T1, p.19);

      iii. in an "I don't know" attitude (e.g. G2, T2, p.18).

2. straightening up
    - i. to introduce a new topic or incident (e.g. Gl, T3, p.25);
    - ii. to strongly agree or disagree (e.g. Gl, T3, p.23);
    - iii. to show sudden interest and enthusiasm (e.g. Gl, Tl, p.13);
3. leaning forward
    - i. to share in a mutual experience (e.g. Gl, Tl, p.13);
    - ii. to agree with or show extraordinary interest in a topic or incident (e.g. Gl, T2, p.16);
4. leaning or sitting back
    - i. to indicate surprise or shock (e.g. Gl, Tl, p.26);
    - ii. to address a question to a listener (e.g. G2, Tl, p.3);
    - iii. to emphasize a point (e.g. G2, T2, p.26).

j. Foot and Leg Movement

1. when correcting one's self (e.g. Gl, T3, p.16).

k. Laughter and Grinning

1. to share a humorous statement or incident (e.g. Gl, Tl, p.12);
2. to denote derision of a statement or opinion (e.g. Gl, Tl, p.12);
3. to share an embarrassing situation, sometimes as if to expunge it (e.g. Gl, T2, p.22);
4. to snicker at one's self when a self-evident statement is made (e.g. G2, Tl, p.13).

l. Total Meaning

No words are exchanged or uttered, but the gestures and actions carry full and mutual understanding as evidenced by the reactions of both persons or all persons. E.g. Gl, Tl, p.8; G2, Tl, p.14.

B. NONFUNCTIONAL FEATURES

Nonfunctional features do not offer any meaning and are not used to convey meaning. Thus they are not necessarily synchronized with any linguistic utterance, and are quite likely not even recognized by the user or other participants in the language situation. Many nonfunctional features are made up of nonconscious actions, and may be nervous or habitual actions. Some may function in the same way as do filler words and phrases, though a full-scale study in itself would be needed to determine that. Personality characteristics play a big part in the adoption and use of nonfunctional features of communication.

a. Negative Eye Contact (looking down or away)

A personality characteristic, e.g. C.

1. to cover a temporary lapse in the conversation (e.g. G2, T1, p.12);
2. to look down to notes when talking (Task 4) or to read directly from notes (e.g. G1, T4b).

b. Movements of Hands and Arms

1. to scratch head or another part of the body, to touch another part of the body, to adjust hair, rub nose, eye, etc. (e.g. G1, T3, p.5);
2. to adjust glasses on nose (e.g. G1, T2, p.23);
3. to adjust clothing, e.g. pulling down sweater; playing with clothing (e.g. G1, T2, p.29);
4. to play (consciously or unconsciously) with objects (e.g. G2, T1, p.3; G2, T2, p.6);
5. to fold and unfold arms (e.g. G2, T1, p.4);
6. to tap fingers on table out of nervousness, impatience, or petulance (e.g. G2, T2, p.5).

c. Movements of Feet and Legs

1. to shift weight from one foot to the other (e.g. G2, T4, p.1).

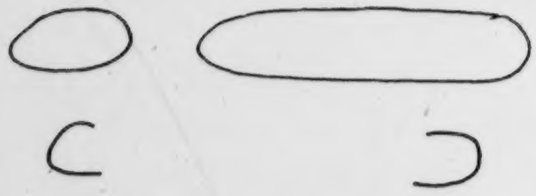
d. Torso Movements

1. to rock body from side to side (e.g. G2, T2, p.18; G2, T4b, p.1);
2. to sit back, when a subject withdraws from the ongoing discourse (e.g. G1, T2, p.24);
3. to sit forward, when a subject includes himself again in the ongoing discourse. The physical involvement indicates social and linguistic involvement. (e.g. G1, T2, p.30);
4. to move body in the direction of another person in order to listen intently (e.g. G2, T4b, p.8).

APPENDIX E

SAMPLE CODED DATA SHEETS AND CODING KEY

CODING KEY

	Extraneous Linguistic Material (ELM); words, phrases, sentence fragments. Types: (1) audible pauses (AP) (2) filler words and phrases (F) (3) repetitions (Rep.) (4) edit mazes or false starts (EM)
/ /	C-unit segmentations
// //	Embedded C-units
2(16,4)	Number of C-units (and number of words per unit)
M = 4 (in red) B = 16 (in red)	Count of Extraneous Linguistic Material units, words or sounds; e.g. "Oh, uh" counts as two units. The letter signifies the count for that key subject.

M = 26 B = 49	Lexical word count. The letter signifies the count for that key subject.
————————	All words continuously underlined in pencil constitute one dependent clause.
Adj. = adjective Adv. = adverb N = noun	Type of clause identified to left of text.
〰〰〰〰〰〰	All words continuously underlined as such constitute a prepositional phrase.
PP	Presence of phrase identified to left of text in parentheses.
ⓝ [in red]	Segmentation of 100 word units for TTR calculation. ⓝ Number given unit for identification. (Appears at beginning of each unit).
(——n——)	Number of words, or lexical word count, for all subjects other than key subjects.

M. Eye contact.		M. /Yeah, the doll's dance was nice./	1(6)
B. Nods head slightly.		B. /Yeah./	1(1)
M. Intense eye contact - raised eyebrows, expressive eyes.	Adj.	M. /What about that, AP um camping trip we were planning?/	1(8)
B. Looks away quickly - rapid right hand movement - regains eye contact.	Adv.	B. AP Oh/yeah, and our moms wouldn't let us 'cause we had to have an adult 'round./	1(16)
M. Eye contact.		M. /Yeah./ Only noone wanted to go./	2(1,6)
B. Right hand extended - taps with right index finger -	Adv. Adv.	B. /Yeah,/ EM first, okay, Graham didn't ⑤ want to go first because Darryl wasn't going/and ... EM when ... because Darryl wasn't going and Graham wasn't going	
both palms out-turned, with eye contact - both arms extended - waves right wrist as if counting -	Adv.	then Dwayne wouldn't go,/ so there was only all us girls,/ then Gail couldn't go/and Charlotte couldn't go/.. Tracey couldn't go/	6(1,12,16,7, 5,5)
both palms upturned, and a circular movement as if to encircle them both.	Adv.	so it was you and me that could only go	
M. Eye contact, then looking down. B adjusts glasses on nose.		M. /And EM I could only - I couldn't go, because noone else was going./	1(11)
B. Eye contact - both arms extended -	N	B. except for me,/and my mom said, "If there's only two of you going then you may as well not go unless there's an adult",/	
shakes head to rearrange hair - shakes head by looking away for "no".	Adv.	and then finally everybody could go/ and then our parents said no because none of the parents could come./	4(13,24,6, 13)
M. Eye contact - looks aside.		M. /Yeah./ That was terrible./	2(1,3)
B. Looking down.	PP	B. AP Uh, huh. You weren't in class in grade two, were you? ⑥	
		M= 4 B= 6	M= 33 B=121

M. With slight sneer and pucked lips.		M. (mimics the sounds the boys made)	
B. Pointing towards M - points to M directly, both palms up, slight shrug of shoulders, both hands gesture pulling out and pushing in of chair, then eye contact.	PP N (that) F N Adv.	B. /Yeah, when Dwayne Rep. um AP Dwayne Puleau in the mornin,/he, like, EM /you took your chair - my chair - down/ and, he thought, F EM like I was kind of late that day/and Rep. you, you thought that I was goin, EM I wasn't going to be there,/ so you took my chair down/and you pushed it in,/and when I walked in the door Dwayne pulled the chair out/and I went to sit down/and you pulled it right out/	9(7,5,8,11,6,5,12,6,6)
M. Eye contact.		M. (laughs)	
B. Gestures to M with right hand.		B. /and I fell on the floor -/and then you just did that this year again, didn't you?/	2(6,12)
M. Eye contact, eyebrows raised in question.		M. /I did?/	1(2)
B. Looks slightly away, raises shoulders slightly, uses right hand to gesture removing book, looks down at her own chair.	PP PP	B. /Remember the time Rep I felt, I felt really tired,/like F I told you I had a headache,/and, I went to get a book out of my desk/ and I sat down, off of my chair/and	4(7,7,11,8)
		M. Oh! AP	
B. Looks at M.		B. 12 you pulled the chair/.. EM the back or somethin. F	1(5)
M. Eye contact, slight shaking of head.		M. /I didn't think you were sitting on it!/ (laughs)	1(9)
B. Looks slightly ahead, extends right hand towards M and looks at her.	PP	B. /I know/I was just getting off of it though/I. Rep. I was half way on and half way off/	3(2,8,9)
		M=1 B=21	M=10 B=139

H looks down to notes on table, briefly to audience, back to notes.	N	/ And, um AP they're medium-sized guard dogs / and they have .. become famous, as family pets or watchdogs /	2(7,10)
Looks up from notes. (Jordie looks at AV equipment for quite a while). PP	Rep.	They - they were used in the war ② as messenger dogs / and they were all - EM	
Looks up to ceiling. PP, PP	F	like for carrying messes, and - messages, to people on the other side or something F and they were also used for, ah - well, EM they were also used in the sport of bullfighting. / They would get in the ring / and, ah fight with the bulls. /	
Looks down briefly to notes for the next point. PP PP, PP			
(Jordie is restless - craning forward, looking around to others and equipment. He is ignored). PP Adv.		They were bred with the mastiff and the boxal, / and when you bred the ma Rep. - the mastiff and the boxal together you got a boxer /	7(9,13,10,6,5,9,14)
Looks down to notes, then to audience again.* Adv.		And when they're born they're four to five inches long, / and weigh about four ounces. /	
Looks down to notes, then to audience again.* PP Adv.		And the first three days of they're, EM when they're born, they usually go and they get their tails cut and their dew claws removed /	3(12,5,23)
Looks down to notes, then to audience again.* Adv.		And, un AP .. when they ③ are six months old and they go and they get their dew claws removed EM I mean their .. ears cropped / and they,	
Closes eyes and shakes her head. (Jordie gives an expression of surprise, juts his head forward, and cups hands over both ears, looking around to others; ignored). Gestures with left hand raised to her left ear. PP	AP	ah go and they cut off their ears / and then they stitch them up and put them on their head, / and then they, um AP .. stick little sort of toothpicks - well not toothpicks EM	
(Jordie turns away, makes an expression of distaste).	F	Rep. sort of little popsicle sticks in their ears / and it	
Raises left arm straight up. PP		keeps them standing up /	5(16,9,12,10,6)

* Note that whenever she looks down at end of a statement for the next point, that next statement begins with "and".

M = 37 M = 172

C Eye contact. Leans forward towards table. Shakes head slightly, raises eyebrows.	N	C	EM (Jeff think) ... Jeff thought you'd really would have enjoyed that./ /He wouldn't have./	2(9,4)
B Eye contact. Hands in lap.	N Adv.	B	/Yeah, Jeff thought I was cracked when I said I didn't wanna go./	1(15)
C Eye contact, smiles.		C	/Yeah/	1(1)
B Eye contact.	PP	B	/Yeah./ I wouldn't wanna go anyway./ I'd freeze my toes off./ It was cold out there. /What was it, thirty below?/ /And then they had/	6(1,7,6,5,5,4)
C looking ahead. Shakes head slightly. Sits back in chair, arms dangling.		C	/No, it was colder/it was about thirty-five/	2(4,5)
B Eye contact.		B	/And then it had wind chill factor./	1(8)
C Eye contact. Raises left hand to scratch head.	N	C	/You know when we .. Rep (when we) helped Jeff with his papers?/	1(9)
		B	/Yeah/	1(1)
C gestures with open left hand by face.	PP	C	RP (Um)../my glasses froze to my face./	1(6)
		B	/Yeah, and they're all/	1(5)
C gestures with finger and thumb below eyes, lifting glasses slightly.	PP	C	/Right here/ EM (At my)- it was] ⑥ [all white under there	1(2)
		B	/Yeah/	1(1)
	PP	C	for about an hour./	1(10)
Both look ahead.			(pause)	

C = 7
B = 0

C = 48
B = 52

G2 T4 p.7

		B	/You should feed her .. two meals a day, but I don't/	
	Adv.		/Our cat, ______________________, has to be fed three times a day, or else it'll get all upset/	
	Adv.		/She .. always wants you to pamper it/ /and if you get mean to it she'll al . EM	
B sticks his nose up in the air slightly.	Rep. PP		she'll (2) EM F sorta stick your her nose up in the air at ya/and walk away ./ and won't meow at you any more/	6(12,17,7, 18,3,3)
(Greg looks very quickly to camera).	Adv.		/Our cat ... we made it a scratching post so it wouldn't scratch everything else but all it uses it is, tree climbing practice./ Just climbs up/an' jumps off/	
(Several of audience grin, including Cary.)			/And it scratches everything else anyway./	4(24,3,3,6)
		(audience laughter)		
B doesn't look to Cary, but looks straight ahead over the audience.		B	/And, Cary thinks they're .. sort of F disgusting	
(Shelley, then Greg, look to Cary. Cary smiles. Several of audience grin).		Ca	/No I don't/	
	Adv.	B	'cause he's allergic to 'em./ They swell up his eyes/and puff his throat./	
	Adv.		/His dog's sort of like a cat, 'cause it, won't eat anything but Pamper./ That's cat food./ Our cat's very fussy eater/ /It (3) won't eat anything but Pamper and Puss 'n Boots, and Doctor Ballard's./	
	Adv.		/And it won't eat any of the Purina Cat Chow, 'cause it's too hard/and it won't .. just won't crunch it up/ Rep.	11(12,5,4,14,4, 6,14,16,7,4,1)
B lifts both hands, clasped, from table quickly. Looks quickly around audience. Eye contact with speaker.	F		Well /that's about all/ /Yes?/	
			B=14	B=172 (3)